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Depreciation

The Appraisal in the Registration Statement

Appraisals for Public Financing

The Six Story Elevator Apartment

Landscaping as an Offset to Depreciation

The Appraisal of Warehouses

Assessing Development Property

Ethics and Professional Conduct

An Appraisal Report

VOL. III, No. 5 OCTOBER, 1935

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AMERICAN INSTITUTE OF REAL ESTATE APPRAISERS

of the National Association of Real Estate Boards

K. Lee Hyder, *Editor-in-Chief*
Harry Grant Atkinson, *Managing Editor*

Volume III | October, 1935 | Number 5

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This publication is provided as a medium for the expression of individual opinion concerning appraisal practice and procedure and topics allied thereto. The articles printed herein do not necessarily represent the endorsement of the Institute nor of the majority of the members excepting as such statements may be designated as approved by the Governing Council. The Editors exercise only a general supervision of the material and assume no responsibility for the opinions expressed by the contributors.

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Entered as second class matter January 17, 1933, at the post office at Chicago, Illinois, under the act of March 3, 1879. Subscription rates: $5.00 a year; $1.25 a copy. Remittances may be made by personal checks, drafts, post office or express money orders, payable to the American Institute of Real Estate Appraisers, Chicago, Ill. Printed in the United States of America.

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Looking Ahead!

The following articles now in preparation will appear in this Journal in subsequent issues:

The Management Factor

Analysis of the Competitive Factor

Condemnation Appraisal Procedure

The Influence of Special Assessments on Home Values.

Neighborhood Factors in Appraising Outlying Business Property

Neighborhood Factors in the Appraising of Homes

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Alley Influence

The Treatment of Depreciation

Procedure in Appraising Leasehold Interests

Effect of Public Improvements on Value

THE INSTITUTE'S REAL ESTATE APPRAISAL CLASS IN SESSION at the UNIVERSITY OF CHICAGO, AUGUST, 1935

President's Page

Who will endow a graduate school in Real Estate Research? Many are the schools in other professions, training and building men for leaders in the various fields; but real estate—representing fifty percent of the wealth of our nation—has no schools comparable with those in medicine, law, journalism, accounting, etc.

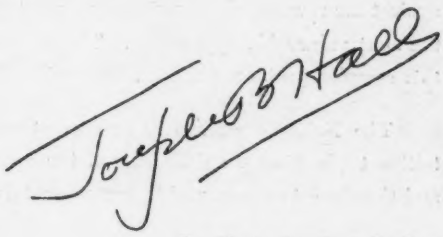
The first Course in Real Estate Appraisal held this summer at the University of Chicago by the American Institute of Real Estate Appraisers has been brought to a close. One-hundred thirty-four students from twenty-six states enthusiastically engaged in an intensive classroom and case-study program. Students, yes—but a majority were experienced appraisers. Many had already achieved distinction in the appraisal profession—yet each one took from two to four weeks' time away from his personal business affairs to come to school and study the latest theory and practice of appraising.

These students represent but a fraction of the hundreds of appraisers throughout the country who expressed interest in the courses, who felt the need for a better understanding of the forces that create value in real property, and who want to learn how to measure more precisely the worth of various kinds of rights in real estate.

Research and education in real estate is one of the major objectives of the American Institute of Real Estate Appraisers. Its case-study courses, so successfully conducted this summer at the University of Chicago, constitute but a small part of a comprehensive program now being developed by K. Lee Hyder and his able committee. This program will become a reality as rapidly as the cooperative efforts of the Members of the Institute and its limited resources can bring it about. The loyalty and the professional spirit of our Members assure us of ultimate success in this great undertaking.

There is much to be done, and the need for men is great—men who will give of their time and effort, not for the honor and glory, not for remuneration, but for the sheer joy of engaging in a movement to advance the profession of appraising, to improve methods, to study, and learn, and then teach others.

We have begun an experiment in education that is already hailed as one of the most interesting experiments in adult business education in our time. The opportunity is far vaster than this. In the endowment to real estate research, some new George F. Baker or John D. Rockefeller has the opportunity to advance the well-being of his fellows in relation to the first essentials of any national planning and the first essentials of every stable human activity and every family's life.



President, American Institute of Real Estate Appraisers

This Thing We Call Depreciation

THROUGHOUT all history the greatest minds of each generation have searched unsuccessfully for the "Elixir of Youth"—the yet unknown and unplaced element which shall stay the ravages of time. Modern achievements in medical and other sciences have been such as to lend some hope for a longer life expectancy; in fact, the biblical span of "three score and ten" might well be outmoded were it not for the offsetting hazards of sudden death from causes unknown a quarter century ago—the penalties of advancing civilization.

The human machine lasts longer in a temperate climate and under a pleasant environment, and each community has its favorite refuge for repose and rejuvenation. And in the mechanical world, as well, the productive machinery must be allotted a period of rest, and undergo rehabilitation if it is to render the highest degree of service.

Man, however, has been ruthless through the ages. He has been wasteful of the earth's resources and careless with the tools with which he works. His greatest enemy has been and still is *depreciation,* a relentless foe of the guerilla type which cannot be defeated and, at best, can only be held in check.

The recent past has been marked by great technological development, by the wholesale scrapping of efficient facilities for those of greater and greater capacity. Age and deterioration have been the smallest factors in the limiting of the useful life of much of our productive equipment.

The coming era must be one of conservation and coordination, of internal reorganization rather than expansion. If we are not to lose that which we have gained, time must be set aside for reconstruction. If we are to set up an adequate defense against the ravages of depreciation we must learn its methods of attack and strengthen the most vulnerable approaches. The real estate appraiser is vitally concerned with this complex problem and his efforts will aid materially in its solution.

The Nation's productive equipment must inevitably deteriorate, but with intelligent planning we shall extend the span of life, augment the units of utility, and thereby—to a measurable degree—retard *this thing we call depreciation.*

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The JOURNAL *of the*

AMERICAN INSTITUTE OF REAL ESTATE APPRAISERS

of the National Association of Real Estate Boards

Volume III | OCTOBER, 1935 | Number 5

Depreciation

Adapted from the text material developed for the Courses in Real Estate Appraisal conducted by the Institute at the University of Chicago during August, 1935. The Journal will carry from time to time further extracts from this text material relating to subjects of special significance.—Ed.

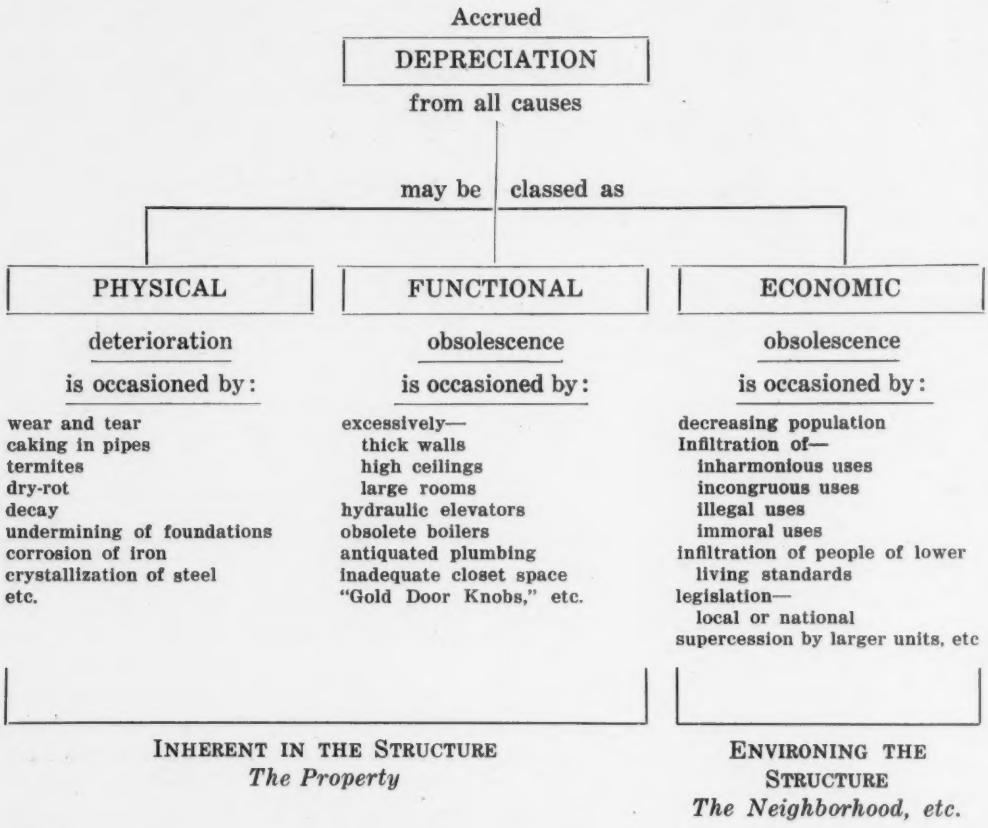
I

DEPRECIATION is a loss in desirability, price, or value, irrespective of the cause. It is an effect. In appraisal technique, the term is relative, usually comparing the condition and desirability of a structural unit as of different moments in time.

The major causes of depreciation may be cataloged under the following headings:

1. *Physical Depreciation*, or deterioration, which is the loss in value occasioned by wear and tear, disintegration, use in service, and/or the action of the elements. It is measured by a comparison of the existing *physical condition* of the building with that of a similar new one;
2. *Functional Depreciation*, or obsolescence, which is the loss in value arising from decreased utility, inadequacy, over-capacity, changes in the arts and sciences, or other influences which affect the structure itself, or which affect its relation with other items in a larger property. This type of depreciation arises from conditions *inherent* in the structure itself;
3. *Economic Depreciation*, or obsolescence, which is the loss in value arising from decreased utility of the structure, which is occasioned by external economic conditions which affect the character or degree of its utilization. This item of depreciation does not arise from conditions inherent in the structure but from those outside of and *environing* it.

For the sake of clarity later it may be well to point out that a "decreased utility" of the structure may be called either a "functional" or an "economic" depreciation, depending entirely upon the cause which brought it about. If the cause is some condition within the structure itself, then it is "functional"; if without the structure, it is "economic."



PHYSICAL DEPRECIATION (deterioration)

In all buildings the inexorable actions of the elements invariably take their toll. Depreciation is as certain as time itself! In addition to those observable deficiencies, or subnormalities arising from use, such as wear and tear, there may be hidden ones as well. Incrustations of lime, magnesia, and other mineral salts in water pipes, the decreased efficiency of heating plants, dry-rot and decay of under-pinning, undermining of the foundation through seepage, crystallization and/or corroding of steel, stoppages of waste in sewer lines, and many other such conditions are responsible for a lowering in value of properties. Such losses, generally called deterioration, are some of the general causes of depreciation.

In a measure, the amount of deterioration which a property suffers will be controlled by the care exercised in its use and the making of repairs when needed. Not uncommonly, owners of properties will neglect to make necessary repairs until great damage is done. The failure to keep in repair the roof, walls, and windows might permit the entrance of rain water, with consequent injury to ceilings, walls, and floors. The failure to ventilate prop-

erly under a house may be conducive to the formation of "dry-rot" and the decay of the understructure. Then, too, termites, if uninterrupted in their labors, will destroy the very wood of which a structure is built.

It thus becomes apparent that the amount of physical deterioration will depend more or less upon the past care accorded the structure. Common are the cases in which identical structures of similar ages have widely different remaining useful lives, due to differences in care and upkeep.

Then, too, the matter of "shoddy" construction cannot be passed without comment. Cheaply-built houses, sometimes called "jerry-built," have comparatively short lives with expensive maintenance costs in the meantime. Well-built structures are created with greater capacity to resist the ravaging influences of time with a minimum amount of maintenance.

In cheaply-built structures, periodic replacements of various items must be made more frequently than in those better constructed. Such buildings also suffer an excessive maintenance cost as contrasted with new buildings or equipment, or those of the same age but of better construction. Property expense may be classified as:

Maintenance refers to the expense incurred in order to obtain the full utility of the property, but which expense does not extend its future useful life. For illustration, installation of a washer in a plumbing fixture, cleaning tubes in a boiler, repainting or redecorating, and similar items are called maintenance.

Replacements, in contradistinction thereto, refer to renewals of items in the building which do extend its physical life, thereby offsetting continuing depreciation. For illustration, the renewal of plumbing fixtures, boilers, elevators, furnaces, and the like are termed replacements.

Thus, the essential difference between "maintenance" on the one hand, and "replacement" on the other, is that while the former expense is incurred for the purpose of preserving the capability of the property and its equipment for future use, the latter is the restoration of the capital used up in service and therefore extends its useful life.

Additions to Capital refers to expenditures on extensions or partial extensions through replacements" in which there is more property added and usually more dollars invested than there were before.

In considering "accrued depreciation" for any property as of any date it is desirable to call attention to two things, (1) the need for an actual physical inspection of the property and (2) the unwarranted use of "average depreciation rates."

Great differences are found in the quality of construction and workmanship in structures built from the same identical plans, but from different specifications. One house may be well built of first class materials; the other may be cheaply built of poorer materials to keep the cost down with the hope of increasing the profit from the sale of the property.

In the first place, such differences will affect not only the reproduction cost new of these respective properties at the time of appraisal, but will affect the maintenance cost as well. These conditions can be discovered only by an actual inspection of the physical property. This inspection will reveal conditions which will lead to the conclusion that the cheaply-built structure will have a lesser reproduction cost new, will have a greater annual maintenance charge, and, finally will have a shorter life. Briefly, deterioration (hence depreciation) will be much more rapid in such properties.

"Average Depreciation Rates" based upon so-called "Life Tables" are dangerous in inexperienced hands and are at best merely a guide or a point of departure in considering any particular case. Practically every depreciation table has been developed and designed for use in the accounting for depreciation rather than in the measurement of existing accrued depreciation in any given structure

as of any given date. Therefore, such tables have no direct practical application as applied to any specific structure.

FUNCTIONAL DEPRECIATION

Functional depreciation is a change in the utility of the structure itself. Some of the conditions cataloged under this type of depreciation are changes in architectural styles and designs, and in interior fixtures and arrangements. In this class belong the out-moded styles, such as those architectural monstrosities of the '80s and '90s with a profusion of "gingerbread" millwork; bizarre cornices, stone fronts, stone towers, turrets, and other evidences of antiquity.

The desire of people to possess the benefit of the latest style always renders the out-moded structure less desirable, makes it antiquated, and at the same time lessens it in desirability and value.

Functional depreciation is also evidenced by such things as:

1. Walls two feet thick where one foot would be adequate.
2. Ceilings fourteen feet high where ten feet would be proper.
3. Hydraulic elevators in a well-located office or apartment structure.
4. Obsolete boilers and heating plants.
5. Old style bathtubs and antiquated plumbing.
6. Houses with rooms too large or too great in number.
7. Houses with an inadequate amount of closet space.
8. Houses which suffer from poor floor plans.
9. Over-capacity of industrial plants because of:
   A. The degree of over-improvement, i.e., the amount of the cost in excess of the need;
   B. The inordinate operating expense occasioned by the over-capacity portion of the plant.
10. "Gold door knobs" (to press the point).
11. Etc.

It is thus seen that functional depreciation is the loss in value arising through decreased utility, inadequacy, over-adequacy, changes in the arts and sciences, or similar influences that affect the structure itself, or its relation with other items comprising the larger property.

Quite often this item of functional depreciation constitutes the major portion of the total depreciation suffered by a property. Not uncommonly, deterioration, called *physical depreciation*, is relatively unimportant and of small amount when contrasted with *functional depreciation*.

ECONOMIC DEPRECIATION

Last, but by no means least of the elements of depreciation is that of economic origin. Frequently this type outweighs all others. Economic depreciation is the loss in value arising from decreased utility which is brought about by external conditions which affect the character or degree of utilization of the property.

Some of the extraneous influences which adversely affect the desirability, utility, and value of property, the result of which is known as "economic depreciation," are:

1. A decreasing population in the neighborhood, city, or metropolitan area.
2. An infiltration of people of lower living standards.
3. An infiltration of any inharmonious, nonconforming property use.
4. An infiltration of illegal or immoral property uses.
5. Legislation, local or national.
6. General economic conditions.

Residential districts change but seldom for the better. In many of the best residential districts of a decade or so ago, the use of property has gravitated to boarding house dedication without the land becoming more valuable for apartment, business, or other usage.

However, it is indicated that the rate of such decline in value will be less in the future than in the past. This is because of the fact that the population growth of the United States has been declining and is predicted, by competent authorities, to

become stationary within another generation. Because of these conditions it appears reasonable to assume that obsolescence will not be as rapid in the future. This applies not only to home properties, but to stores, office, and other structures as well.

This condition is the effect of immigration restrictions along with changes in the nation's birth and death rates. Even without the new immigration laws, the tendency would be for a decline in the rate of growth. Philosophically, integration develops resistance against further integration: growth develops resistance against further growth. The manifestations of this all-pervading principle are discernible on every hand.

A study of this form of obsolescence in various communities leads one to the conclusion that its rate is not uniform in all cities. Further, it is discovered that its rate is fastest in those areas most rapidly increasing in population, that is, in such places obsolescence most rapidly takes its toll. During times of a rapid influx of population into any city, new areas are subdivided into lots and new residential districts become established.

As places of residence, these newer areas present a stronger appeal than the older ones. People residing in the older areas, particularly the younger element, are inclined to move into the newer areas. Home properties in the old district are sold or rented, such sales usually being made to those who cannot afford to move into the newer tracts. Therefore, such sales are made to people of lower earning abilities, educational attainments, and social characteristics. This, along with the transition from an "owner-occupied" to a "rented-occupied" neighborhood, is accompanied by a lowering in desirability and value.

In this manner the transition takes place. Not uncommonly, particularly in the larger cities, there may be a succession of movements out of the area, followed by movements into the district of people of successively lower social characteristics, each accompanied by a corresponding decline in desirability and value of home properties therein.

However there is a meliorative trend in parts of many such neighborhoods. Numerous are the cases wherein the downward movement of real estate values has been arrested by a transition of the utility of the properties to more productive uses, such as apartments, stores, or industries. In such cases the depreciation of the buildings would be full and complete, and accompanied by an increase in the land value. Thus, the land might be said to absorb the building value.

For illustration, in a growing apartment house district, a lot costing $4,000 might have been improved with a $12,000 structure which was warranted at the time. However, with the passage of time and the successive improvement of the area with larger and more costly structures which are then warranted, the original $12,000 building suffers a distinct competitive disadvantage.

The larger buildings, because of lower unit construction costs and lower operating expenses (per rentable unit) are able to rent space for a lesser amount (per rentable unit).

It is demonstrable that multiple-family rentals tend to be set by the more efficient properties and for this reason the income of smaller competitors in the same area must suffer. Therefore, the reduction in the market price of the smaller property from its reproduction cost is, to a large extent, the measure of economic depreciation.

In this case it is seen that the once adequate improvement has become an under-

improvement or, rather a "misplaced" improvement due to an inefficiency in utility which has been brought about by extraneous influences of an economic nature. This loss in value might be designated best as economic depreciation.

By way of illustration, the reproduction cost of the smaller apartment at the time of its construction may have been as follows:

Land Value, by comparison	$ 4,000
Building, its cost	12,000
Total Cost	$16,000

However, with the passage of time and the erection of larger units, the following condition may be found:

Land Value, by comparison, has increased to	$ 8,000
Building—its cost today less physical and functional depreciation	10,000
Total Cost less depreciation	$18,000

However, due to the enforced lowering in rentals in the smaller building, occasioned by the larger, it may be that the capitalized value would fall to $13,000. Then, and in such event, the "economic depreciation" would be $5,000 ($18,000 less $5,000).

Depreciation arising from *legislation* is well-illustrated by what happened to breweries after the enactment of prohibition. The value of such buildings, machinery, and equipment immediately sank to low levels and the land followed in the downward movement for the very sufficient reason that it could not be used for any other purpose so long as the structure remained thereon, except after considerable expense had been incurred for remodeling for other types of utilization, if such were economically possible.

There are at least three ways in which zoning may depreciate the value of properties:

1. By restricting properties to uses for which they are not economically suited.
2. By adding to an already existing over-supply of properties restricted to a particular utilization.
3. By preventing properties already improved and in use being converted to a higher and better use.

Depreciation arising from *changed economic conditions* has been recognized by the courts, particularly those bodies dealing with inheritance tax parcels. By way of illustration, in an actual case an expensive store building was erected to cater to a high-class retail shopping trade with ultra-expensive merchandise, the profits from which provided adequate returns on the cost of the structure. The "depression" brought about a change in merchandising methods and forced the lowering of the grade of merchandise handled. As a consequence, the expensive, beautifully decorated high-class structure became too costly for the type of business then transacted. This change in economic conditions brought about a change in merchandising methods with the result that a less costly structure would have served the same purpose. This difference has been recognized as a depreciation due to changed economic conditions, and, in this particular case, was allowed as obsolescence before the structural and functional depreciation was considered.

II

Buildings and equipment have finite lives. Unlike land, there comes a time when usefulness must cease because of exhaustion, economic conditions, or other reasons. Age refers to that which lies in the past; life refers to that which remains.

Buildings and equipment may be said to possess two kinds of life, (1) physical life, and (2) useful life. It is an observable fact that the remaining *useful* life of a building is ofttimes of much shorter duration than its *physical* life. This incontrovertible fact leads to the inescap-

able conclusion that there must be factors other than physical life operating to produce depreciation.

In appraisal procedure, empirical rules have been formulated for the purpose of pointing out the "average" lives of buildings. These rules are helpful only insofar as they mark a starting point as a guide. However, they are general averages computed from widely dissimilar quantities, the exceptions to which are legion.

As a guide in estimating depreciation arising from any of its causes, age is of the least consequence; observation is of infinitely greater importance.

FUTURE USEFUL LIFE

The future useful life of a structure, residence, or other types, will terminate; that is, its depreciation will become 100% at that time when its presence upon the site ceases to enhance the value of the site.

For illustration, if an old property is found to produce an annual revenue which is just sufficient to pay taxes, insurance, upkeep and repairs, rent collections, and other expenses of the property, including a reasonable return (interest) for the use of the land, leaving no surplus imputable to the structure itself, neither at present nor prospective, it has ceased to possess value for the reason that it has ceased to justify its existence by producing a net return to itself. In such cases the structure is not an "improvement" for the reason it does not improve the land; and the value of the property is the value of the land alone. However, if the income is sufficient to carry the taxes and other charges on the land, there may be some nominal value attaching to the improvement for this reason but at best this is of a temporary character.

ACCOUNTING FOR DEPRECIATION

There are two commonly known processes employed in providing for anticipated depreciation. They are (1) the Sinking Fund Method and (2) the Straight Line Method. An exposition of their employment in the appraisal process follows:

In the *Sinking Fund Method* the annual depreciation charge (for the future) is assumed to be equivalent to that sum of money which, if invested each year in a compound interest sinking fund will, at the end of the estimated useful life of the building, be sufficient to permit the recapture of the original cost of the structure, or its value as of the time of the appraisal.

For illustration, a building is assumed to have 50 years of remaining useful life; and is worth $5,000 today. If it is assumed that funds can be invested safely at 3% interest compounded annually; then by reference to a compound interest table is found the factor .00887 which means that, for each $8.87 invested at the end of each year, for 50 consecutive years, in a 3% account compounded annually, there will have accrued in the account the amount of $1,000. Therefore, it will be necessary to deposit $44.35 each year in such an account (5 times $8.87) in order to withdraw $5,000 at the end of the term (50 years).

The *Straight Line Method* assumes that depreciation will be proportional to the estimated remaining useful life of the structure. For illustration, if a building is new and its remaining useful life is estimated as being 50 years, then 1/50th of its cost (2%) is assumed to be the annual charge for depreciation.

Or, if a building is 10 years old, and its remaining life is estimated to be 40 years, assuming it to be a 50-year structure, then the accrued reserve for de-

preciation is said to be 10/50th, or 20% of its reproduction cost new at current prices; and the depreciation provision for the future is shown as 2% per annum of the today's cost of reproduction.

This method automatically implies the following conditions:

1. A decreasing annual gross income to building.
2. A decreasing annual building interest charge.
3. A fixed annual operating expense.
4. A fixed annual depreciation charge.
5. A fixed annual net income to the land.

The following tabulation, taken from "Economic Approach to Valuation Procedure" by Loring O. McCormich and George L. Schmutz, on page 164, mathematically points out how the Straight Line Method postulates a declining annual income, if the land value is assumed to remain constant. In the tabulation taken from this work, it is manifest that, if the gross income is assumed to decline annually in an amount equal to interest on the depreciation charged off, or the capital recaptured, then, by the land residual process there will be left the same net income imputable to the land for each year during the remaining life of the building, and thereafter as well. This is arithmetically shown in the following tabulation:

Assumptions Regarding an Hypothetical Property		
Gross Income during 1st year		$ 61,812
Operating expense, taxes, etc		$ 26,000
Building, cost (and value too)		$200,000
Remaining Life of Structure (years)		33
1st Year		
Gross Income		$ 61,812
Expenses and taxes	$26,000	
Capital ($200,000)		
Interest—8%	$ 16,000	
Depreciation 3.33%	$ 6,667	$ 48,667
Net to Land		$ 13,145
2nd Year		
Gross Income	$ 61,812	
Less reduction in income because of capital returned 8% of $6,667	$ 553	$ 61,279
Expenses and taxes	$ 26,000	
Capital (now $193,333)		
Interest 8%	$ 15,467	
Depreciation—same	$ 6,667	$ 48,134
Net to Land		$ 13,145
3rd Year		
Gross Income	$ 61,279	
Less reduction of income because of capital returned 8% of $6,667	$ 553	$ 60,746
Expenses and taxes	$ 26,000	
Capital (now $186,670)		
Interest, 8%	$ 14,934	
Depreciation—same	$ 6,667	$ 47,601
Net to Land		$ 13,145

The sole purpose of this discussion is not to decry one process at the expense of the other, but rather to expound the mathematical processes involved and to further point out that, in the valuation of income-producing structures, the Straight Line Method of depreciation more nearly conforms to conditions which prevail in such properties. In no sense does the depreciation, or decline in the value of the structure occur in exactly the same fashion that is contemplated by either of these two processes, although the latter conforms more nearly than the former.

The latter has another distinct advantage, particularly in the estimation of accrued depreciation or that which has taken place in the past, in that the depreciation suffered, as figured by the Straight Line Method added to the value of the property at the time of appraisal, will always equal its reproduction cost. By the Sinking Fund process, the accrued depreciation in addition to the value of the property will never exactly equal the reproduction cost except at some one moment in the future.

In the *Income Method* of estimating depreciation, the amount of depreciation estimated is not employed as one of the stepping stones in arriving at an estimate of the value of the property, as in the former cases, but really is more in the nature

of an anti-climax. It is a computation made after the value of the structure has been estimated.

This method contemplates the direct estimation of the value of the structure based upon a consideration of its reasonably expected future income, and other factors. For illustration, if it may be assumed that the reasonable net income imputable to a structure will be $1,000 a year for 30 years, the value of the structure may be said to be the present worth of this annuity. This, when deducted from the reproduction cost new of the structure leaves a residue which is called the total depreciation, i. e., structural, functional, and economic, all combined in the one figure. The process, however, is highly speculative and theoretical and seldom applicable in actual practice.

However, if it is reasonable to assume that the net income to the structure will decline with the passage of time, then a "declining annuity" might be used. It must be remembered that *in arriving at this net income imputable to the structure, the physical inspection is important in order to arrive at a reasonable estimate of maintenance charges and other matters affecting the reasonable future net income.*

III

APPORTIONMENT OF DEPRECIATION[1]

The estimation of accrued depreciation arising from the "over-improvement" of land is graphically shown in Chart I which is explained as follows:

1. Estimate the reproduction cost of the property by the summation method;
2. Estimate the value of the property, by the building residual process, or otherwise;
3. Subtract the latter from the former (Item 2 from Item 1) and the difference will represent the depreciation arising from all causes,—structural, functional, and economic;
4. Project an hypothetical proper improvement upon the site;
5. Subtract the latter from the reproduction cost (Item 4 from Item 1), and the difference will be the measure of depreciation due to the "over-improvement" of the site;
6. Subtract Item 2 from Item 4 and this difference will be the amount of depreciation due to other factors.

The following explanation is offered concerning depreciation occasioned by the "under-improvement" of land graphically shown on the second Chart.

1. Estimate the total reproduction cost of the property;
2. Estimate the value of the property by the building residual process, or otherwise;
3. Subtract the latter from the former (Item 2 from Item 1) and the difference is the depreciation arising from all causes;
4. Project an hypothetical proper improvement upon the site;
5. Subtract the reproduction cost of the building from the cost of the hypothetical building (Item 1 from Item 4) and the difference is the amount of the under improvement.

It is an interesting observation that an "under-improvement" of $5,000 (as regards cost) may be responsible for an actual depreciation of $10,000 as regards value.

CONCLUSION

In all considerations of depreciation, or lessening in value, one fact boldly stands out—that "deterioration," excluding accumulated repairs, may be responsible for only a relatively small portion of the total depreciation suffered by a structure. Stated differently, the matter of providing for depreciation arising in the future is less a matter of the recapture of capital, as contemplated by the Sinking Fund Method, but more a matter of compensating for the devastating effects of obsolescence, both functional and economic.

And finally, some of the common beliefs which have not withstood the test of time, and which deserve recognition here only

[1]Taken from "Economic Approach to Valuation Procedure" by Loring O. McCormick and George L. Schmutz, Vol. II, p. 176, et seq. (out of print.)

CHART I—DEPRECIATION ARISING FROM OVER-IMPROVEMENT

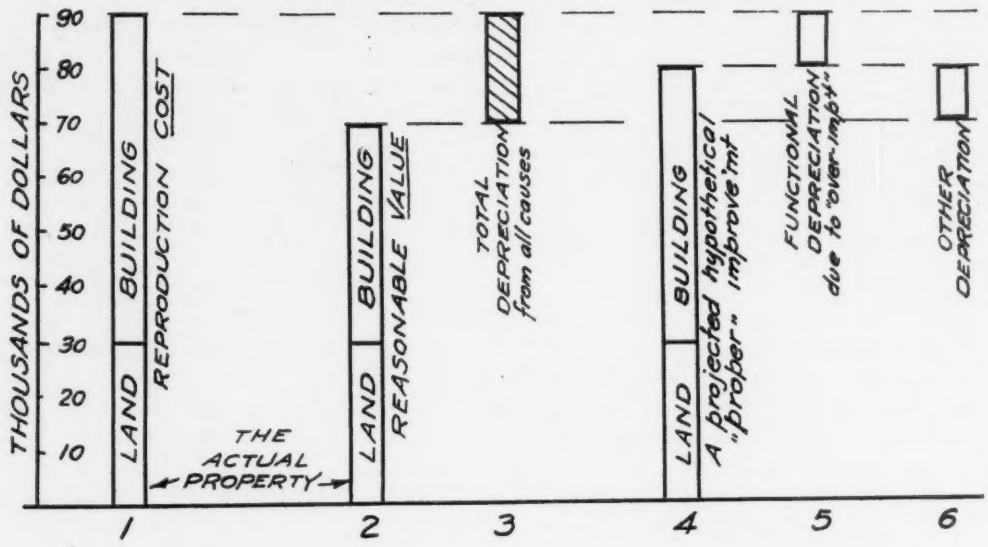
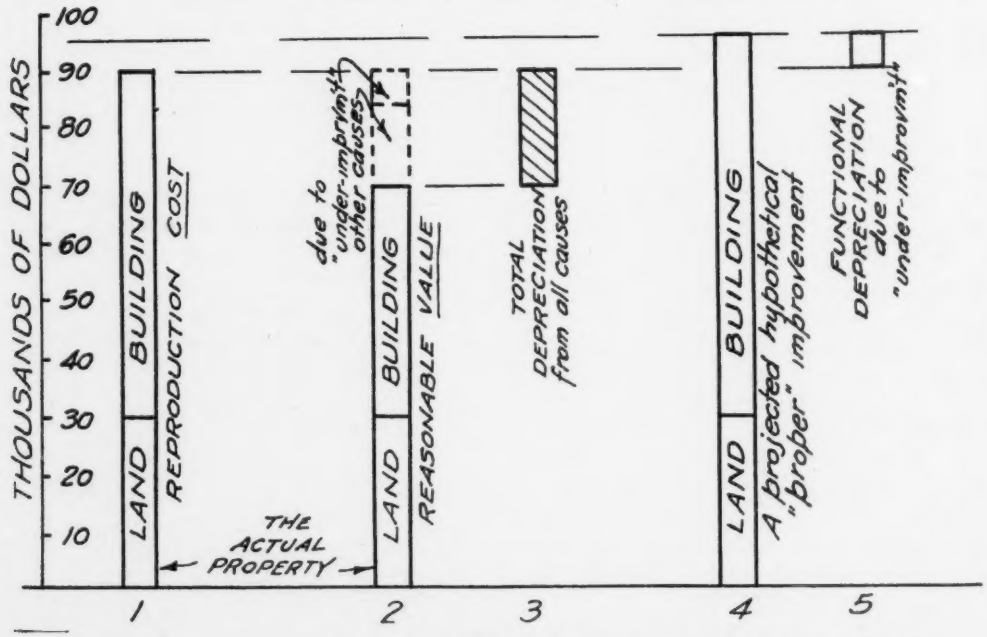


CHART II—DEPRECIATION ARISING FROM UNDER-IMPROVEMENT



From "Economic Approach to Valuation Procedure" by Loring O. McCormick and George L. Schmutz, 1933.

for the purpose of pointing out that they are fallacious, and hence dangerous, are:

1. That depreciation in structures will be offset by increases in land prices.
2. That earnings of the structure will remain constant in amount during the life of the building.
3. That the value of a building is synonymous with its cost.
4. That the accrued depreciation existing in a building is proportional to its expired life.
5. That amortization provision should be made for cost. This is a tacit assumption in many appraisals, though not consciously asserted, yet unconsciously involved.
6. That accrued depreciation in non-income producing buildings cannot be measured in the same manner as in income producing structures.

These six common beliefs are entirely without warrant.

IV

CASE-REPORT[2]

THE PROBLEM

The American Appraisal Company was engaged to determine the "full and true value" of the buildings of a large Meat Packing plant for the purpose of assessment for real estate taxation.

Land, machinery and equipment values were not contested.

The status of the case was as follows:

The plant was erected during 1918 to 1920 at a total cost (land, buildings, machinery, and equipment) of $14,000,000.00. As it was strictly a war measure cost was not considered. Consequently the construction and equipment was excessively expensive, and of a capacity greatly beyond the requirements under normal conditions —in fact it was never operated at anywhere near its capacity.

A large portion of the original cost had been amortized and successively written down on the books of account.

In 1922 and continuously every two years until 1930, hearings were held before the State Tax Commission and Board of Review in an effort to have obsolescence due to unnecessarily expensive building construction and over-capacity fully recognized in determining taxable value.

The claims were in generalities—no definite proof to support them was ever presented.

REHEARING BEFORE TAX COMMISSION

In 1930, for the purpose of reopening the entire controversy, a special hearing was held before the Tax Commission in order to formulate a recommendation which would be submitted to the State Supreme Court for final adjudication.

This resulted in the following procedure:

The City Tax Assessor after consideration of certain structural obsolescence, but not over-capacity, valued the buildings at $5,372,400.00.

The Board of Review recognized additional obsolescence due to a new law prohibiting the making of "Oleo" and other factors, and reduced the value to $4,215,-864.00.

The taxpayers then presented a report made by their engineers, setting forth certain excess production cost due to over-capacity.

The Tax Commission favorably considered this report and made a further reduction to $3,861,144.00.

APPEAL TO SUPREME COURT

Suit was then entered by the City against the Tax Commission in the State Supreme Court in an effort to have the value of the Board of Review sustained, on the principle that general obsolescence due to over-capacity should not be considered in fixing the taxable value.

2. *City of St. Paul, et al* vs. *McNiven, et al.* Decided June 19, 1931. N. W. Reporter, Vol. 237, page 410.

The Tax Commission then asked for a further hearing.

INVESTIGATION AND REPORT

At this stage of the proceedings The American Appraisal Company was engaged by the taxpayer to make a thorough investigation and valuation and to testify before the Commission in support of its findings.

Its report not only determined the building obsolescence and over-capacity, but also established the factor of increased cost of $250,000.00 per annum for the operation of this plant as compared with one of sufficient capacity for the actual volume of production, thereby supporting a fair market value of $3,000,000.00.

Its testimony was supplemented by complete exhibits and charts, the result of an extensive survey and study involving the assembly and analysis of livestock receipts at various other markets, the slaughter at such markets of the various classes of livestock, and the development of peak demands which must be met, thereby establishing the required capacity in the market under consideration.

A detailed analysis of the plant facilities had also been made to definitely determine and illustrate the excess capacity and consequent obsolescence. This necessitated a complete survey of a modern packing plant through every department from the killing rooms to the final smoking and packing rooms, and the presentation of the conclusions was made in such detail as could be absolutely substantiated.

The Commission commented favorably upon the clarity and conclusiveness of the testimony and exhibits which were then incorporated in the documents submitted for consideration of the Supreme Court.

STATE SUPREME COURT DECISION

The appeal to the Supreme Court was based upon the facts as determined in the investigations of The American Appraisal Company, and the decision which fully sustains its findings was as follows:

Referring to its testimony relating to increased operation costs the Court says:

> "An expert witness for the taxpayer in arriving at an opinion as to fair sale value stated it would cost $250,000.00 per year more to operate this plant than it would to operate one of capacity suitable for the market. Obviously this would be taken into consideration in the sale of the property."

In rendering the final decision and emphasizing that "sale value must control," the Court again quotes The American Appraisal Company's witness:

> "The witness further said, 'The reason I figured that way was because I took the position if I had been called in by some outside packer who told me he wished to purchase the buildings and structures and asked me what, in my judgment, he could afford to pay for them, taking everything into consideration, I would recommend that he pay not over $3,000,000.00 which would include a very careful study of the possibilities he might have for the increase in this market.' "
>
> "Over-capacity of a packing plant and consequent increased expense of operation are proper elements for consideration in arriving at the full and true value of such plant for taxation . . . sale value must control."

♣ ♣ ♣

The Appraisal in the Registration Statement

By J. L. HAYNES

Principal Engineer of the Security and Exchange Commission

THE Securities Act, now a little over two years old, has as its basic requirement the full and fair disclosure of the character of securities offered for sale in interstate commerce. Its aim is, of course, also the prevention of fraud in the sale of these securities.

PURPOSE OF THE SECURITIES ACT

Let me briefly outline the requirements of the Securities Act and the powers of the Securities and Exchange Commission, in which the administration of the Act is now vested.

Major Requirements

One of the major requirements of the Act is that there shall be filed with the Commission a registration statement and a copy of the prospectus to be distributed to the public in connection with the sale of securities, such filing being termed "registration."

Certain Exemptions

Certain classes of securities are exempt from registration. Generally speaking, such securities are Federal or State securities, *certain* issues by religious organizations, certain building and loan securities, securities of certain common carriers, and certain other securities as set forth in Section 3 of the Act. There are also exempt certain transactions, notably those which do not involve an offering to the general public.

Effective Date

A registration statement becomes effective 20 days after filing, without affirmative action on the part of the Commission. It should be noted that *the Commission does not issue permits.* Neither does the fact that a statement has become effective mean that the Commission has in any way approved or passed upon the merits of a security.

Rendering Statement Ineffective

However, the Commission may prevent a statement from becoming effective, or later suspend its effectiveness by the exercise of powers granted in Sec. 8 of the Act. A portion of this section reads:

> "If it appears to the Commission at any time that the registration statement includes any untrue statement of a material fact or omits to state any material fact required to be stated therein or necessary to make the statements therein not misleading, the Commission may, after notice by personal service or the sending of confirmed telegraphic notice, and after opportunity for hearing within 15 days after such notice, issue a stop order suspending the effectiveness of the registration statement."

Another portion of this section reads:

> "The Commission is hereby empowered to make an examination in any case in order to determine whether a stop order should be issued . . ."

REVIEW OF APPRAISER'S FIGURES

With regard to the values set forth in appraisals and in the property account, a physical examination of the properties and a complete check-up of the appraiser's detailed figures may be made at any time. This is not done in every case, of course, but now more frequently than a year ago.

Address delivered at a special meeting of the Class in Real Estate Appraisal at the University of Chicago on August 28, 1935, by J. L. Haynes.

MECHANICS OF FILING APPRAISAL REPORTS

Now a word or two as to the mechanics of filing, which, in so far as the appraiser is concerned, are relatively simple. Provided the appraiser is named in the registration statement or prospectus as having established any figures or statements used therein, he should furnish his client, in addition to any other copies desired, three copies of his appraisal report to be filed as exhibits with the registration statement (which is required to be filed in triplicate). Accompanying each report there should be furnished the written consent of the appraiser to such use as is made of the report in the registration statement and in the prospectus.

INSPECTION OF STATEMENTS AND APPRAISALS

The Commission maintains a docket room in which the registration statements and any appraisal reports or other documents filed therewith are available for public inspection. This docket room functions very much in the nature of a public library, except, of course, filings may not be removed from the office. In addition, if any person desires copies of portions of any registration statement he may obtain photostatic copies upon payment of the cost of their preparation.

LIABILITY OF APPRAISER

Much has been written, silly interpretations have been published, and much confusion exists as to the liabilities of an appraiser under the Securities Act, although the language on this point is very clear-cut. He is, by definition of the Act, classed as an expert. Under certain conditions *he may be sued* by a damaged investor, but *only for misstatements of material facts* and *material omissions* made by him.

However, an analysis of the liability provisions brings out that: provided the appraiser acts honestly, even to the extent of believing untruths to be true, he is *not* liable provided he can sustain the burden of proof that he conducted a reasonable investigation and had reasonable grounds for his beliefs and findings. The Act now includes this definition: "The standard of reasonableness shall be that of a prudent man in the management of his own property."

THE BALANCE SHEET

One of the items required in the registration statement, and the one which I think is of chief interest to you, is the balance sheet. I say of interest to you because it is here that the appraiser's work appears—in summary form at least—in the financial statements.

There is required to be set forth in the balance sheet the item of property, plant, and equipment, and as a separate item, the deduction of reserves for depreciation and depletion. Intangibles, such as franchises, patents and trade-marks, goodwill, etc., are also required to be set forth separately.

Certain explanatory schedules must accompany the balance sheet. Chief among these of interest to an appraiser would be the schedule indicating the major classifications of the plant, property, and equipment account. This schedule also calls for statements regarding the value of any item of property abandoned and not written off.

At this time independent appraisal is not mandatory. In this connection, under Section 19 of the Act, the Commission is given the authority "to prescribe the form or forms in which required information

shall be set forth, the items or details to be shown in the balance sheet and earning statement, and the method to be followed in the preparation of accounts, in the appraisal or valuation of assets and liabilities, and in the determination of depreciation."

REGULATIONS RELATIVE TO APPRAISALS

As yet, there have been promulgated no rules and regulations relative to appraisals. The Commission has, however, made public several opinions which reflect the policy to date with respect to certain appraisal practices and value concepts.

I have prepared a brief resumé of several appraisal matters attacked by the Commission. Some are amusing—several the result of loose thinking—some patently fraudulent. In the following quotations I have taken the liberty of omitting detailed machine descriptions, dimensions, etc., not important to the principle involved.

A DECISION RELATIVE TO AN APPRAISAL

In the case of Haddam Distillers, Inc., the Commission attacked the

1. Inaccurate description of properties.
2. Abuse of pricing data in connection with the determination of reproduction cost.
3. Inadequate depreciation.
4. Valuation of intangibles.

With respect to *description of properties*, the Commission finds:

> "that the third story was not fit for factory purposes and could only be termed an attic, and that the attic did not have adequate flooring. The inclusion of the attic floor area in the total floor space (computation) was a misrepresentation since without alterations it was not usable, having no light or ventilation."

With respect to the *use of improper pricing data* and the inadequate depreciation taken, the opinion, in reviewing the situation, states that one 10 H. P. motor connected to centrifugal pump was listed at "replacement cost new $400, sound value $400."

The manufacturer's representative testified it was originally made in 1931, that a reasonable rate of depreciation was 20% per year, and that this equipment now sells for $230. After reviewing many similar items, the Commission finds:

> "All the items complained of were standard equipment, and the present price could have been obtained. The factor of depreciation was regularly ignored. The serial numbers were on many of the machines, so the date of purchase could have been ascertained. In addition, some of the machinery was never seen by the appraiser. Not only was the appraisal inexcusably careless, but the testimony impels toward the view that there was a dishonest attempt to inflate values beyond any minimum that differences of opinion might condone. It is, therefore, apparent that the balance sheet which reflects the appraisal, and the appraisal contain untrue statements as to material facts."

With respect to the *appraisal of intangibles and capitalization in perpetuity*, the Commission in its opinion reviews an appraisal of a special whiskey maturing process which was valued in an appraisal at $100,000, although no supporting data were given. It was admitted that the process had never been tested in practical operation. The appraiser, on the witness stand, admitted he knew nothing about the process and his so-called "work sheet" contained no figures for a basis of valuation. The Commission's opinion states:

> "Irresponsibility is manifest in this conduct of attributing the value of $100,000 to an untested process the details of which were unknown . . ."

The same appraisal company's report also contained an appraisal of *certain water rights*. These were valued for power purposes on the basis of 200 H. P. at $400 per H. P., the net worth of such power being arrived at by dividing by 2. The testimony revealed that the water

rights were available only after an annual assessment of $224.00; that substantial repairs to a dam were necessary, and that the appraiser paid no attention to these factors.

His method of computing the flow of the stream was to time the flow of a potato for 100 feet, although the testimony was to the effect that the stream flow was rapid and could not be measured by rule of thumb methods. With respect to this element of the appraisal, the Commission concludes:

> "Apart from any question as to the propriety of the methods employed to determine the value of a natural resource such as this, the appraiser's arbitrary allocation of a certain horsepower to the stream and his arbitrary valuation of this horsepower at $400 per h.p., without any evidence of having calculated the head that could be developed, mean and constant stream flow, or costs of commercial power, is but another indication of the irresponsibility that characterizes the report."

The report also contained a purported appraisal of the *intangible value* of an *artesian well.* The appraiser estimated a 34,000 gallon per day flow, priced at city water rates, although no municipal supply existed. Testimony at the hearing given the registrant developed that the best the well had ever done was 14,000 gallons under a pressure pump.

The appraisal contained no deduction for the cost of pumping or maintenance; no deduction for depreciation on the necessary equipment or for the loss of interest on the capital invested in pumping machinery. The Commission with respect to this item finds:

> "It is clear that the appraisal of water rights neglected all the postulates of scientific methods and that the valuation cannot be considered other than false."

ANOTHER DECISION RELATIVE TO AN APPRAISAL

In the case of Continental Distillers & Importers, Inc., the properties involved consisted of a small piece of land traversed by two polluted creeks. There were on the site three buildings, the floors of one of which had fallen in. Although this property had recently changed hands for $5,000, it was appraised at $164,000.

From testimony adduced at the hearing given the registrant, the Commission in its formal opinion with respect to the land (which was appraised at $22,500) finds:

> "If sound value, the term used by the appraiser, is intended as the equivalent of the fair market value of the land, disregard of the recent sale of the entire property—land, buildings and water rights—at $5,000, the total disregard of the tax appraisal and of the local real estate market, make the appraisals of the land unreliable."

In appraising the *value of the streams,* which it is stated were intended to be used for distillery purposes, the appraiser purported to compute their hypothetical saving over the cost of water from a municipal supply to the extent of $7,700 per year. This was treated as the equivalent of 10% on investment of $77,000, which figure was set forth as the appraised value of the properties. In setting forth its opinion the Commission notes:

> "The saving is capitalized in perpetuity, or on the implied assumption that the enterprise and the saving will last forever and that the assumed water rate charges will never decrease."

With respect to the appraisal of this polluted stream at $77,000, the Commission further finds:

> "The result in the case of a company which is not a going concern but in the early stages of promotion and as applied to water rights appurtenant to land which, altogether with the buildings thereon, had cost only $5,000 a few days before the appraisal, is fantastic and offensive to common sense, no matter how pseudo-scientific the language describing it, or the computation achieving it, may be."

In this connection, while not set forth in the opinion, it is to be noted that even had the appraiser been able by a tenable theory to sustain a lesser but still large

water rights value, such figure would only serve to dilute the stockholders' equity and lessen his dividends. It would create a capital account seldom found in a distilling corporation except one of the purely promotional type. It means that the company which issues shares to its promoters for water rights is forever saddled with the dividend requirements of such shares and is at a competitive disadvantage with a company which does not have such an obligation.

With respect to the *non-depreciation of architects' fees,* the Commission finds:

> "It is noted that in arriving at 'sound value' the appraiser did not reduce this $30,000 item by any amount proportional to the depreciation on the buildings, which is equivalent to saying that if fees of the character indicated, to the amount of $30,000 are incurred in erecting a building, and the building wears out and becomes useless, although the building itself must be written out of the property account, all of the fees and similar expenses, incurred in erecting it, may remain—a patent absurdity."

With respect to the *appraisal of boilers* in the appraisal report of the Continental Distillers & Importers case, the Commission finds:

> "They were sold as junk for a nominal price, and the company was glad to get rid of them. Nevertheless, they appear in the appraisal quoted in the prospectus at $8,963. It is difficult to find temperate language for the adequate description of such a situation as this."

OPINIONS AVAILABLE WITHOUT COST

The foregoing few extracts were intended, if you please, as a 10-minute case book, illustrative of the work of the Commission on appraisal matters. The various complete opinions are available without charge on request. Valuation problems arise almost daily and, of course, more decisions will be rendered, which in time no doubt will serve to formulate a substantial portion of the value concepts and bases for appraisals for public finance.

One question of major importance mentioned in one opinion, but upon which question specifically no opinion has been rendered, is indicated by the following quotation:

> "Reproduction cost new has, it is true, been required to be considered as one element in evaluating property of public utilities for rate-making purposes. But this is a far cry from using such a standard *alone* to set up property values in the balance sheet of an ordinary commercial enterprise against which securities are issued to a controlling group of promoters. But this issue is not now raised."

What is the situation when a would-be appraiser hazards a guess at values and hits very close to the mark? No one is about to be defrauded. It is my personal contention that in calling such a guess by the name of appraisal, a misstatement of fact has been made. So far, however, no clear-cut case of this nature has come to issue before the Commission for ruling.

♣ ♣ ♣

Appraisals for Purposes of Public Financing

By K. LEE HYDER, M. A. I.

FOR many years there has been more or less control over the issuance and sale of real estate securities to the public. Until quite recently, however, this has been entirely a state function. In many states the Public Service Commissions have created a department or division to pass upon these questions, while in other states a separate commission has actually been set up for such purpose.

The Federal Securities Act of 1933 has made a considerable change in this situation and may make a more basic change in the future as the Act and the regulations thereunder become clarified and perhaps expanded.

The tremendous growth in public financing which occurred during the boom days of the 20's was directly responsible for the promulgation of the Federal Securities Act. It became apparent that financial programs had been developed, not only for real estate projects but for many other types of properties, to an extent entirely out of proportion to the investment behind them. During the later 20's it was a very common occurrence to find a construction project financed on borrowed capital through the sale of securities to the public in an amount sufficient to purchase the land, construct the building, and even pay the financing charges; in other words, to cover the entire expense and leave to the promoters an interest in the common stock of the enterprise for which no actual cash investment had been made.

This situation was, of course, inconsistent with sound economic principles. Under conditions of reasonable stability capital invested in real estate for the purpose of producing a return cannot create value in excess of such investment until the enterprise takes on a different character, or until surrounding developments would tend to increase the original investment. The safety of the purchaser of the securities in such a project, therefore, is entirely lacking if the promoter or builder does not furnish a portion of the capital.

STATE CONTROL

The State Security Commissions during the latter part of the boom period began to recognize this situation to some degree, but were poorly equipped in personnel or legal backing and were therefore unable aggressively to control the situation.

Particularly in real estate securities the investment bankers found a wide and favorable market, and consequently welcomed almost any application regardless of its size or the merit of the security behind the issue. The promoters, on the other hand, were willing to pay large prices to the investment bankers for capital, especially where this meant little out-of-pocket cost to them.

Whether or not the Federal Government should take away from the States the power to control public financing is a much discussed question. It may be admitted that the talking points in favor of Federal control are excellent in view of the disastrous condition that followed in the wake of the real estate boom.

Under the Securities Act, however, and the Securities Exchange Act, the intent to

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Address delivered at a special meeting of the Class in Real Estate Appraisal at the University of Chicago on August 23, 1935, by K. Lee Hyde, M. A. I., Vice-Pres. of the American Appraisal Company.

date has been limited to the registration of securities rather than the control of financial programs. For a number of reasons, however, it is quite probable that the Securities Act and the Securities Exchange Act are going to be continued and perhaps strengthened in certain respects.

In the first place the distribution of securities does not necessarily fall within state lines. A bond that is purchased in Pennsylvania and is secured by a property in Chicago has exactly the same element of risk as a similar bond purchased in Illinois. On the other hand, the laws of Pennsylvania and the laws of Illinois may be entirely different.

Certain State Security Commissions adopted regulations that were more or less in opposition to those of other Commissions. For example, Wisconsin adopted a policy on building projects wherein not more than 60% of the original cost or value could be borrowed under first mortgage bonds. At exactly the same time Illinois was permitting a ratio of 80%, which in turn was later cut to 70%. This required that the banker would have to qualify the securities upon a different basis depending upon the state in which they were to be sold.

It seems entirely inconsistent that a purchaser of a bond, because he happens to live in Wisconsin, would need better protection than another purchaser living across the state line—say, in Waukegan, Illinois. In fact, in some states there was little if any control over the sale of securities to the public.

Many other discrepancies were to be found. Some Commissions had definite regulations as to the distinction between realty and personal property. Obviously, first mortgage bonds could and should not be issued where the security might be moved away. Therefore, the furnishings in an apartment house, for example, were considered as personal property. However, many items were difficult to classify, such as refrigerators, gas stoves, screens, and even the pumps and mechanical equipment that might be essential to building operation.

The appraiser faced a very difficult problem in setting up his property initially. He might estimate accurately the value of the land and the reasonable cost or value of the improvements, but he was never sure, unless he knew the laws of the particular states in which the securities were to be sold, just what further inclusions might be legitimately considered.

Then there was the question of indirect construction costs and the limiting amounts that might be allowed therefor, such as taxes, interest, and insurance during construction, and also the question of the financing costs themselves. In many instances during the boom period the actual financial charges in completing a building project ran from 10 to 15 per cent of the total cost.

This was excessive, of course, and out of proportion to the expense involved, but was brought about because of the great demand for money and the competitive situation of the bankers. For this reason Wisconsin had a more or less unwritten regulation that limited the costs of financing in arriving at the base to about 6% on 60% of the total costs involved; that is, 3.6%. Illinois had certain regulations in this respect, also variable under different conditions, but which would approximate 6% on 80% of costs or appraised values, and reflecting thereby 4.8% in total.

PRESENT FEDERAL REGULATIONS

The Securities Act in its present form does not attempt to lay down standards,

nor does it attempt to usurp the powers of the State Commissions. The sole purpose of the Act was to compel the furnishing of basic data or the making available of information in connection therewith to the purchaser of securities.

Conformance with the law requires the filing of a Registration Statement in elaborate detail. It is intended that all pertinent information as to the issuer, the issue itself, the property, and other details shall be included in this Statement. The only attempt at control is brought about by the liability under the Act whereby the banker and all interested parties become financially responsible following loss to the investor in the securities if an untrue statement is made, or if any material fact is omitted from the Registration Statement. In other words, the purchaser is assumed to have available to him all details that might guide him in making an investment in the securities. If something happens later for which the issuer is not in any way responsible, the purchaser would lose his investment. If it were a matter, however, that should or could have been presented, and the banker or others failed to do so, then the liability clause holds.

The greatest criticism against the Securities Act, perhaps, has been directed more particularly toward the great difficulty in deciding in advance "what is a material fact." The vast amount of information that must be assembled in order to cover fully the factors surrounding any issue of securities creates extreme hazards through the possibility of inadvertent omissions. The result to date has been a tremendous decrease in public financing which in turn has unquestionably held back recovery to a substantial extent.

As the matter now appears, the Securities Act and its related Securities Exchange Act unquestionably will be permanent. That they will be revised in certain particulars is perhaps advisable and inevitable, and no doubt this can be accomplished in a manner that will eliminate many of the present unfavorable features.

The greatest work in this connection will rest with the Securities and Exchange Commission, created to administer the Act. This Commission is given wide powers both in interpretation and regulation. It has gone slowly, but has made progress, and the great economic expense occasioned to the people may ultimately be repaid by the protection which will be obtained.

A careful review of the Commission's activities during the first year, when the administrative duties were under the Federal Trade Commission, and during the past year following the creation of the Securities and Exchange Commission, leads to the conclusion that several of the fundamentals involved have been passed by with very little consideration. Particularly in connection with the *purpose and function of appraisals* the Commission has so far failed to show any proper understanding of the matter.

It is believed, however, that this is more of a temporary condition and that studies being made by the Commission will ultimately classify and interpret the function of the appraisal to an extent that will be reflected in proper and adequate regulation. Only by so doing will the Registration Statement become the protection that was intended under the provisions of the Act.

FUNCTION OF APPRAISAL SERVICE

To obtain a proper understanding of the use and purpose of appraisals in public financing it is necessary to consider many factors. To begin with there are

two primary, limiting elements in the issuing of securities:

1. The collateral against which the loan is made must be sufficient in extent and value reasonably to protect the investor in the event of a default.
2. The potentialities of net income from the operation of the business conducted on the property must be sufficient virtually to guarantee the interest in the securities even if the net income should be seriously curtailed because of reasons not in evidence at the time.

In other words, protection must be provided in two ways: First, through the property itself; and secondly, by the income produced therefrom.

Now, it would be incompatible with the principles involved to adopt for the first test a basis of liquidation; that is, to limit the financing to some per cent of the price that might be realized through the actual forced sale under the hammer of the security behind the issue. If any such possible necessity was in prospect, then, of course, the issue would not be justified in the first place. The sole justification for public financing is in the expectancy that the property will continue to be used profitably during the period of the issue.

Net income, however, is subject to wide fluctuation in short cycles. Interest must be paid regularly and on certain specified dates, otherwise the securities go into default. This leads to the adoption of more or less arbitrary ratios of net profit to interest for various classes of securities. For example, a first mortgage bond issue, in order to be sold, might show in one case interest obligations that had a ratio as compared to net income of 1 to 2½; that is, the net income would be 2½ times bond interest. This might be more or less for any particular situation.

Within this factor of safety, if the net income decreases substantially, there would still be protection sufficient to guarantee the ultimate redemption of the bonds, even though the project itself were more or less economically unsuccessful; and there might be a great diminution in the total value of the assets, but still the bonds would not be in material jeopardy.

For this reason the valuation of the assets on the basis of the amount that might be realized through liquidation may be entirely unsound. The real limitation should be the "value for use" of the property; that is, the worth of the property for actual continued operation from which the net income would be derived.

Some years ago the State of California was inclined to adopt the liquidation basis for the valuation of assets behind an issue of securities where speculative factors were involved. In one particular example an extensive gypsum deposit was being exploited in Southern California. It was necessary to build some 10 or 12 miles of railroad for this purpose, to erect a mill, bring in equipment, erect housing for labor, and make other substantial investments. Money was required to develop this project and an issue of securities was proposed. The California Commission was inclined to take the position that the proper value to be used as a base was not the actual cost of acquiring the rights to produce the product or the investment for such purpose, but rather the price to be obtained, if the Company failed, for the physical assets remaining.

An investigation quickly disclosed that there would be no possibility of realizing anything under such conditions; that the only realization from the railroad, for example, would be in the price of the rails after they were torn up and shipped to the market which amount would not justify the removal at all. A strict interpretation of this, therefore, would be that the property had no value, or, at least, that any securities issued could not legitimately be sold to the public.

This was, of course, fallacious. The project was undoubtedly speculative, but this did not mean that it might not be publicly financed. In this particular case the thing to do was to issue securities of a speculative nature; call them by such name; and offer a coupon rate that would reflect the hazard involved. The State of Illinois, as well as some other states, has overcome this to some extent by classifying the character and type of securities primarily according to their basic risk.

From this discussion we are led to the conclusion that the appraisal must be made with due consideration to all of the other factors involved. It must reflect the reasonable value of the property for continued operation and not for liquidation, but in accordance with its "value for use." We are then led to the premise that any appraisal for purposes of public financing must be founded upon an initial consideration of:

1. The type of property which is to form the security for the loan.
2. The program under which the property is to be utilized and operated in the carrying forward of the enterprise as contemplated.

The first of these considerations is basic and can be definitely marked and recognized in any particular appraisal; the second is conditional and may be a vital factor in the appraisal itself or dependent upon a showing by the applicant on matters for which the appraiser has—and may properly have—no responsibility.

It is this second consideration that makes it extremely difficult to lay down hard and fast rules and regulations that may be universally applied. There are, however, certain fundamental requirements and principles that may be readily established, whose acceptance would go far toward correcting many of the difficulties and narrowing the latitude of honest differences of opinion.

The properties susceptible to public financing may be classified usually into one of the following:

1. Industrial
2. Investment
3. Natural Resource
4. Service
5. Residential
6. Agricultural
7. Public Utility
8. Prospective developments for any of the above.

The program under which the property is to be utilized might be found under any one of the following:

1. For continuation of its normal use, assuming competent management and a profitable going concern.
2. For use in connection with a proposed conversion to meet conditions other than those existing at the date of appraisal.
3. For a special use which might create a higher utility or value.
4. For use under conditions that would lessen current or former utility and result in a diminished value.
5. For total or partial liquidation under forced sale requiring the placing on the market for disposal, thereby limiting all or part of the property to the present realization.

It is apparent from the above outline that the value of the property may vary within wide limitations depending upon the program for its future operation. This is, perhaps, the most important single factor in approaching the appraisal process in any question involving public financing. The basis of use, therefore, must be the "value for use" under the particular program contemplated and which might lie within the complete range set forth.

As previously discussed, the appraisal is required to develop the base value for the assets offered as security, in accordance with the use to be made of the assets. There are other vital reasons, however, for appraisal service. The net income, which is the second test as to the stability of an issue of securities, is not the past

net income but the *probable future income.*

The past records may form a guide to the judgment of what may take place, but must be tempered to meet the future situation as nearly as it can be anticipated. Furthermore, this future net income is dependent, in some instances, very materially upon the status of the fixed assets. The provision for maintenance and for depreciation becomes definitely an operating expense, just as the materials and labor used in carrying on the service or manufacture of the product to which the fixed assets are devoted.

The operating statements, therefore, are not true operating statements until the property charges have been analyzed and reconciled with the property itself. This very frequently makes a basic change in the probability of the net income available for interest on the securities to be issued. It is not a matter of accounting. It is one entirely of engineering and appraisal.

The expense of depreciation is continuing and provision for replacement is essential to the carrying on of normal operations. Maintenance and replacement charges must be predicated upon the property dollars of today; that is, the costs of material and labor in accordance with the extent and condition of the property as it currently exists.

It is evident, therefore, that the appraiser's function is far beyond the estimation of value; in fact, it embraces the determination of the relationship of net income to interest charges as one of its considerations.

PLACE OF THE APPRAISAL IN THE FEDERAL SECURITIES ACT

Appraisals, then, if they were to fully conform to the intent of the Securities Act, should furnish the basic evidence:

1. To support the Fixed Assets Account, as stated in the balance sheet, with evidence of the existence, location, and utility of different units or classifications of property represented by such accounts, and their value in accordance with the market conditions and prospective utilization.
2. To support the Depreciation Reserve Account, as stated in the balance sheet, with the evidence of the actual conditions of the properties as to deterioration, inadequacy, and obsolescence as influencing their remaining serviceable life for use by a going concern.
3. To support the charges for depreciation, maintenance, and other property charges in the operating and profit and loss statements, and to establish their consistency with the actual property conditions, values, and remaining serviceable life.
4. To establish that the assets are properly and adequately valued for insurance purposes in order that such asset values may not be lost in case of destruction of the property.

Without support for the figures in the balance sheet and operating statement as to "fixed assets," "depreciation reserve," "depreciation," and "maintenance," by an actual inspection, inventory, and appraisal of the properties representing such assets, there is no authentic nor authoritative evidence that the accounting figures are consistent with the property facts which these figures are supposed to represent.

THE APPRAISAL

Confining the appraisal service for a moment to the preparation of the report upon the fixed assets, which would not necessarily involve the valuation of the assets, there are certain general requirements that must be met in every appraisal for financing purposes, regardless of the type of property involved. These general requirements include the setting forth of certain factual information upon which the conclusions of the appraiser were determined and embrace:

1. The date of the appraisal.
2. Character and extent of the investigation.
3. Basis and method of valuation.

4. Property description and inventory.
5. Use and utility of property.
6. Source and extent of information by others.
7. Conclusions of the appraiser.
8. Qualifications of conclusions.
9. Qualifications of the appraiser.

Each appraisal engagement will vary materially as to the degree of detail under which these general requirements must be made. As a whole, however, the report that would be ultimately submitted should be sufficient clearly to disclose each of the above points.

In order to consider the practical approach to specific appraisal problems, a schedule has been drawn up that will clearly indicate the distinction in the processes and requirements for appraisals covering different types of property. This schedule, under the headings of "Industrial Property," "Investment Property," "Natural Resource Property," etc., shows the basis or the necessity of investigating and reporting upon the various phases which may be involved.

Naturally the first important point is the "concept of value"; there is then the question of the permissibility of an appraisal of parts of the property as distinguished from an appraisal of the whole; the necessity for estimating the cost of reproduction new; the proper treatment of depreciation; the proper

APPRAISALS FOR PURPOSES OF PUBLIC FINANCING — OUTLINE OF CONCEPTS AND REQUIREMENTS

	TYPE OF PROPERTY						
			NATURAL RESOURCE				
	INDUSTRIAL	INVESTMENT	RESOURCE	FACILITIES	SERVICE	RESIDENTIAL	AGRICULTURAL
CONCEPT OF VALUE	Value for use	Market value	Market value	Value for use	Value for use	Market value	Market value
VALUATION OF PARTS	Permissible	Improper	Undesirable if developed	Undesirable	Permissible	Improper	Improper
COST OF REPRODUCTION NEW OR TRENDED ORIGINAL COST	Essential	Desirable	.....	Essential	Essential	Desirable	Desirable
DEPRECIATION:							
Deterioration (Physical)	Essential	Essential	.....	Essential	Essential	Essential	Desirable
Functional (Obsolescence)	Essential	Essential	.....	Essential	Essential	Essential	Desirable
Economic	Not essential	Essential	.....	Essential	Not involved	Essential	Desirable
NET INCOME FROM OPERATION:							
Consideration to	Not essential	Essential	Usual	With whole only	Not involved	Proper	Essential
Direct capitalization of	Not usual	Proper	Proper	With whole only	Not involved	Proper	Proper
USUAL BASIS OF APPRAISAL:							
Sound value (to going concern)	Usual	Desirable	.....	Usual	Usual	Desirable	Desirable
Market Value	Not essential	Essential	Desirable	With whole only	Not involved	Essential	Essential
Market Price	Not essential	Desirable	Desirable	With whole only	Not involved	Desirable	Desirable

NOTE: This outline is intended to embrace the customary conditions under which appraisals are submitted in substantiation of the fixed asset accounts on the balance sheet presented in an application for registration of securities to be offered for sale to the public. It is based upon the assumption that the properties involved are to be utilized in the operation of the enterprise and reflects the minimum inclusions and requirements. It is recognized that additional information may be essential to any application but may be furnished in statements supplementary to or independently from the appraisal itself.

treatment of net income from operation; and other basic factors.

In referring to the accompanying schedule we may take up for discussion under "appraisals prepared for public financing" the distinction between those covering industrial properties and those covering investment properties. In so doing the following definitions of each class of property are given:

Industrial Property:

In a broad sense all of the tangible and intangible assets pertinent to the conduct of an enterprise for the manufacturing, processing, and assembling of finished products from raw or fabricated materials; also, in a limited sense, the land, fixed improvements, machinery, and all equipment—fixed or movable—comprising the facilities devoted to such enterprises.

Investment Property:

A property which is within itself a business enterprise consisting of all tangible and intangible assets considered as integral with the property, assembled and developed as a single unit of utility for lease or rental (in whole or in part), to others for profit.

A careful consideration of the above definitions shows the reason for the distinction in the appraisal limitations. In the case of the industrial property the plant facilities are simply tools used in conducting the business—therefore, the concept of value is "value for use." To a certain extent the concept for an investment property is "value for use," but since this type of property in itself is a business enterprise we are led to the conclusion that "value for use" is more properly expressed as "market value." "Market value" may then be defined as follows:

"The amount expressed in terms of money which a purchaser would be justified in paying for a property as of a certain date, assuming he were to acquire thereby all of the rights and benefits to the equivalent extent possessed by the owner."

In the next phase we find that the "valuation of parts" is permissible in the appraisal of an industrial property, whereas it is improper in the appraisal of an investment property. This means that it would be quite proper for an appraiser to estimate the present value of the land; or independently to establish the "sound value" of the facilities of an industrial property, assuming their full utilization or any degree of utilization, without including the land at all. In this connection "sound value" may be defined as follows:

"Sound Value has a definite and specific meaning, entirely distinct from 'Market Value,' although its measure in terms of money might be equivalent under certain conditions. It is measured usually by the cost of reproduction new in money as of any date, less depreciation established with reference to the relative desirability of the property for present and future performance and ownership as compared to a new property under known or assumed conditions of operation, but without regard to the economic conditions which might influence the profitableness of operation or the status of business or industry as a whole."

On the other hand, this would not be proper in the case of an investment property since it is impossible to divorce the physical assets from the business itself, and therefore the report and valuation must be all-inclusive.

In the case of the appraisal of the industrial property there is, of course, the necessity for considering the business elements, the productivity of the plant, the markets, the selling price of the product, and finally the potential earnings. These earnings, however, do not emanate directly from the physical assets but rather are attributable in a large extent to other factors. Someone must report upon them in any proposed financing program, however, and this may be done by the appraiser; by a showing upon the part of the applicant; or by covering them sufficiently in the statements of audit which supplement the application. In any event it is quite proper for the appraiser to limit his report to the value of the fixed assets under the proposed degree of utilization.

Other factors are tabulated along somewhat the same line; for example, it would be essential in most instances to develop the cost of reproduction new for an industrial property; whereas, it might be eliminated in certain cases for an investment property, although it would always be desirable.

In considering accrued depreciation, the industrial property might be depreciated in accordance with its physical condition; that is, deterioration and its functional capacity without regard to the economic status of the industry as a whole which might otherwise limit the volume of business that the company would be able to anticipate. On the other hand, in an investment property every phase of depreciation must be considered, including the physical, the functional, and the economic.

Net income from operation is not essential in all appraisals of industrial properties, although it might well be considered on certain occasions; whereas it is absolutely necessary in the appraisal of investment property—perhaps not always to the extent of direct capitalization, but at least for material consideration.

In the appraisal of natural resources we have a somewhat similar problem, but this takes on a further complication due to the fact that a depleting resource is being exploited; that is, the resource itself is constantly losing value just as the depreciable assets are losing value. The exploitation of natural resources is a business enterprise as a whole, but the facilities used for such purpose are similar to the facilities in any industrial plant.

Based upon this broad outline it is possible to tabulate with some certainty the elements which would be considered in any appraisal for public financing under the respective types:

INDUSTRIAL PROPERTY

Essential

1. General Requirements.
2. Cost of reproduction new.
3. Sound value.
4. Depreciation (observed).
   Deterioration (Physical condition).
   Functional (Plant capacity, obsolescence, etc.).
5. Certification of appraiser, with resumé of conclusions, basis of appraisal, and qualifications of conclusions (if any).

Not Essential

1. Market value.
2. Market price.
3. Original (historical) cost.
4. Consideration of profits from operation of enterprise.
5. Depreciation.
   Economic.
6. Valuation of property as a unit or inclusion in appraisal of all of the parts thereof.
   ("Valuation of Parts" permissible where properly qualified in certification of appraiser.)

Optional

1. Economics of enterprise and industry as a whole.
2. Analyses of operations and estimates of potentialities.
3. Estimates of value for uses or disposal upon bases other than adopted as primary in the appraisal.
4. Estimates of conversion, expansion, or partial treatment or disposal of property with or without cost estimates.
5. Appraisal of appurtenant property, tangible or intangible, such as merchandise inventory, investments, patents, processes, contracts, and good will.
6. Establishment of fixed property charges for inclusion in statements of others, including rates and normal amounts required for property maintenance, retirements and replacements, and other charges affecting current and future operations under recognized and predetermined "reserves" or otherwise.

INVESTMENT PROPERTY

Essential

1. General Requirements.
2. Market value.
3. Market price.
4. Depreciation—
   Deterioration.

Functional.
Economic.

5. Consideration of profits from operation of property.
6. Valuation of property as a unit.
   ("Valuation of Parts" improper in all instances excepting as qualified simply as an exhibit for consideration and not as a measure of value.)
7. Certification of appraiser with conclusions of value.
8. Market value of land separately as vacant for its "highest and best use."

Desirable (Frequently Essential)

1. Cost of reproduction new of structural or other improvements.
2. Sound value (as defined).
3. Establishment of fixed property charges for inclusion in current and/or future operating statements.
4. Estimates of conversion and rehabilitation requirements and potentialities resulting therefrom.

Not Essential

Original Cost.

Optional

1. Estimates of value for uses or disposal for purposes other than adopted as primary in the appraisal.
2. Establishment of fixed property charges including rates and normal amounts required for property maintenance, amortization, and depreciation.

NATURAL RESOURCE PROPERTY

Essential

1. General Requirements.
2. Deposits (or other natural resources being exploited)
   A. Statements as to the character, extent, and availability of the land and natural resources. (This may be independently determined or introduced from reports of geologists or other experts. Source of information to be stated.)
   B. Computation of remaining mineral or other reserves. (This may be independently determined or introduced from reports of other engineers or experts. Source of information to be stated.)
   C. Description and usually estimates of costs reflected in existing "opening" and development of natural resource.
   D. Market value—estimated:
      a. Upon comparative basis.
      b. Upon capitalization of benefits of ownership over normal royalty or other customary charges for the exploitation of similar resources.
      c. Upon capitalization of net returns anticipated from future expectancy of operation above all costs and amortization and return upon capital required.
      The use of this basis of necessity requires the estimation (and/or consideration of statements of other experts) of prospective production, remaining life of resource, markets, and selling prices of products and the resulting net profits, as well as the determination of the capital requirements and the amount of the net profits reasonably required to satisfy the same.
3. Facilities
   A. Cost of reproduction new.
   B. Sound value.
   C. Depreciation
      a. Deterioration.
      b. Functional.
      c. Economic.
4. General—
   Certification of appraiser with resumé of conclusions, basis of appraisal, and qualifications of conclusions (if any).

Desirable

1. Establishment of fixed property charges for incorporation in current or future operating statements, including rates and normal amounts under the production program and remaining life of the resource—required for property maintenance, retirements and replacements, amortization and depletion, and other charges.
2. Estimates of conversion and rehabilitation requirements and potentialities resulting therefrom (where pertinent).
3. Valuation of property as a unit.
   ("Valuation of Parts" permissible where properly qualified in certification of appraiser.)

Not Essential

Original Cost.

Optional

1. Economics of industry as a whole.
2. Estimates of value for uses or disposal upon bases other than adopted as primary in the appraisal.

Under the present conditions there is very little so-called real estate financing taking place. Actually, however, as con-

ditions improve there will be a revival of construction in investment properties. To meet such requirements, as has been brought out, the appraisal should set forth clearly many things, the more important of which may now be summarized:

1. Description of property in reasonable detail.
2. Condition of property and requirements in rehabilitation.
3. Estimate of the cost of reproduction new and the basis of making such estimate; that is, what has been included and excluded in connection with the overheads or indirect construction costs, financing costs, etc., as well as the direct labor and materials.
4. Income analysis including discussion of the tenancy; the past and present operations, and the future outlook and the reasons therefor; the basis and method of analyzing the operating statements with particular reference to the treatment of property expense thereon, such as maintenance, replacement, and provision for amortization.
5. The capitalization rate adopted and the reasons therefor, including factors of competition and return from similar investments. In this connection a straight line capitalization rate is the most desirable, but it must include an allowance for risk and should be adopted after provision for replacements upon the basis of the current price levels.
6. "Market value" estimate and frequently a discussion and estimate of "market price."
7. Limitations of appraisal and qualifications.

The report prepared should be clear and easily digested. The best form would be a letter of transmittal, with or without a certificate, containing all of the essentials in condensed form; this to be followed with a descriptive report upon the property and the details of the inclusions and exclusions, together with the methods of computation. With this would usually be furnished the necessary photographs, plat plans, recommendations, etc. Finally, further details might be furnished, such as the itemized inventory of the property; operating statements used as a basis for reconstruction; reports of others; and any additional pertinent material.

The 1935 actual appraisal is a complex instrument. In the case of a property of any magnitude it is doubtful if any *single individual* is competent to complete such an appraisal unassisted. It is rather a matter of cooperative effort under proper supervision. The appraiser must be qualified primarily to direct the engagement and investigation and to ultimately make the value estimate. He uses, of course, the help of others, but he is familiar with their ability and the steps which they have taken in assembling the data which he requires. The appraiser finally, of course, accepts the responsibility, but his report should properly set forth the fact that he has had assistance and to what degree such assistance has entered into his conclusions. The accuracy of his conclusions is no greater than the data which he has assembled.

The capitalization of net income alone is not sufficient; the estimate of the costs, or cost of reproduction alone, are not sufficient. *Both are essential.* Returns to capital tend to create a certain level in accordance with the risk involved. At the moment the returns are low, and the income assumes greater importance than the costs. This condition may well be reversed and unquestionably will be when and as some measure of stability returns.

It has been shown that the appraiser must assume increasing responsibility for the future. He must not only arrive at a reasonable estimate of the value of the property, but he must go much further and furnish to the accountant and to others data which will enable a proper consideration of the business and its potentialities.

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The Six-Story Elevator Apartment House

A Study Giving Certain "Rule of Thumb" Guides

By S. Edwin Kazdin, M. A. I.

FOR many years, the six (6) story elevator building has proved to be the most popular unit of apartment house construction in New York City. A recent survey discloses the fact that during the past four years over 70% of the apartment houses built in the Borough of Manhattan were of this type. With land values proportionately lower in the other boroughs, the percentage is much higher. In the Borough of the Bronx, 95% of all apartments built or under construction this year were six story elevator houses, and in Brooklyn a veritable "boom" in this type of construction has taken place.

This pronounced increase in building is due in a large measure to the improvement in the "mortgage money" market. Lending institutions are again seeking first mortgage investments and, since there is little or no refinancing taking place at the present time, a ready source is naturally found in new construction. A "glut" of new building would hurt the new as well as the older structures and would impair the safety of all mortgage investments. Fear is already voiced that the increase of new apartments in some neighborhoods will exert an adverse influence on existing buildings which in most cases are struggling to pay their fixed charges. To the extent that rents which are obtained from new buildings compare favorably with the rents which are being paid in old structures, that fear is justified. A careful study, however, shows that the new buildings are being constructed in strategic locations, close to transportation, to rent at from $20 to $25 per room per month. This is about 25% higher, on an average, than the rent that is being obtained in existing buildings. It must be readily apparent that there can be no extensive and widespread building until rents are increased to the point where the requisite investments will show a fair profit.

In the final analysis the income producing ability of a structure determines its value, but the cost to build is a potent factor and exerts a powerful influence. Some appraisers hold that when the value arrived at by the income process is greater than the cost to reproduce, then cost should be used as the basis of value. When a valuation arrived at by the income process is less than the reproduction cost of the property, it is safer to use the income method of valuation. It is the writer's conviction, however, that properties should be valued at all times on the basis of income. In periods of either depression or inflation proper allowance should be made for the abnormal conditions in the choice of capitalization rates. In those cases where the property fails to develop an adequate return on the investment, it must be due, either to an improper improvement of the land or to an unusual reduction of income caused by outside economic influences. Where the superimposed structure is clearly the best improvement for the plot, the land value should be made residual. In all other cases, the building value should be made residual. In the case of new structures, after allowance is made for a fair return on the building investment and after pro-

vision is made for the amortization of that investment over the life of the building, the income imputable to the land should result in a value equal to that which can be found on a "comparison" basis. In any case, the wise appraiser will use more than one method to check the valuation of a property before arriving at the final conclusion.

The writer has set up certain "rule of thumb" guides, based on his experience in the management, financing, and appraising of the six (6) story elevator apartment house which may prove helpful to mortgage lenders and appraisers generally. He has selected for his analysis a building situated on a plot 125 x 100 as a typical and economically sound unit of construction. This building contains 59 apartments, 182 rooms, and is laid out in 1½, 2½, 3, and 4 room suites. The approximate cube of the building is 590,000 and using a cubit foot factor of 36c, which includes architects' fees, insurance, and taxes during construction, the total cost of the building is $212,500. The cost per room in round figures, therefore, is $1170. The cost per front foot is $1700. It is also well to note that the gross cubic content is 3,242 feet per room.

It should be of interest to know the minimum rental per room per month that must be obtained to make a new six (6) story elevator building profitable in competition with other forms of investment. The size of the rooms, the layout, the value of the plot—all have their effect. Knowing the total cost of the property, we can determine the yield necessary to invite the requisite investment. We can estimate the operating expenses and fixed charges and after providing for reasonable vacancies and for the amortization of the investment in the building during its life, we can find the gross rent necessary to cover all. The operating expenses are estimated as applicable to buildings from one to eight years old under good management.

ESTIMATED FIXED AND OPERATING EXPENSES

Operating Expenses:		Per Room	Per Cube	%
Fuel	$2,300	$12.63	.0039	26.5
Painting	2,100	11.53	.0036	24.1
Salaries	1,800	9.88	.0031	20.7
Light & Power	750	4.12	.0013	8.6
Supplies	480	2.64	.0008	5.5
General Repairs	350	1.92	.0006	4.0
Misc. Expense	350	1.92	.0006	4.0
Elevator Service	300	1.65	.0005	3.5
Plumbing Repairs	250	1.37	.0004	2.9
Annual Operating Expenses	$8,680	$47.66	.0148	99.8
Say	$8,700	$48.00*	.015†	
Fixed Charges:				
Taxes ($225,000 @ $2.80)	$6,300	$34.62	$.0107	
Insurance	750	4.12	.0013	
Water	750	4.12	.0013	
Annual Fixed Charges	$7,800	$42.86	$.0133	
Say	....	$43.00*	$.013†	
Total Fixed and Operating Expenses	$16,500	$91.00*	$.028†	

Our study discloses that this typical building must command a gross rental of at least $18.50 per room per month. The writer has considered that an allowance of 10% for vacancies is adequate and that the net income should yield 7½% on the building after provision for a return of the investment, and also pay 5½% on the value of the land.

To Determine the Income Necessary to Return Investment in Building in Forty Years and Pay 7½% After Provision for Fixed, Operating Expenses, and Reserves, and Pay 5½% on Value of Plot.

Amount necessary to return $212,500 in 40 years and pay 7½%

*Per room.

†Per cubic foot.

($212,500 ÷ 12.5944)		$16,872
5½% on value of plot ($37,500)		2,063
		$18,935
Operating Expenses		8,700
Fixed Charges		7,800
Reserves for Replacements:		
Refrigerators—10 years	$590	
Stoves—5 years	413	1,003
NET RENT TO BE DEVELOPED		$36,438
Gross Income Required		$40,500
Allowance for Vacancies		4,050
NET RENT		**$36,450**

Just a word about capitalization rates. The determination of the proper interest rate to use in valuation problems is a matter of exercising sound judgment based on proper analysis. Interest yields on long term investments are a guide. The interest paid on savings accounts, the interest rate on good first mortgages, the yield on high grade public utility and railroad bonds, the yield on "governments," and the prevailing rates on annuities are helpful in qualifying the rate of income that should be produced by an investment in real estate. A rate of interest that we may have used in a period of inflated rents and high costs is not the one we would continue to use in a period of depressed rentals and reduced costs. Experience teaches that the rate will vary in an inverse ratio to the safety of the returns as diagnosed by a capable appraiser.

Savings banks are now paying 2% interest; "governments" are yielding less than 3%; high grade utility and railroad bonds yield less than 4%; money for prime first mortgages is available at 4½% and 5%. Moreover, there are vast sums that are seeking investment in real estate and, considering the prospect for increased rents and land values, the rates of return should be somewhat lower than those commonly used, viz: 8% in building investments and 6% on land. It is the writer's opinion that a yield of 7½% on the investment in the building, after providing for the amortization of this investment, is attractive. The income imputable to the land under a properly superimposed building capitalized at 5½% should result in the fair value of the plot. These rates will result in an over-all yield of 10.5%

YIELD ON INVESTMENT AT VARIOUS RENTALS

Average Rent Per Room Per Month	Annual Gross Rent (Round Nos.)	Allow. for Vacancies (10%)	Net Annual Rent	Operating, Fixed Charges, & Reserves for Replacements	Yield on Total Investment before Depreciation.		Yield on Equity of $100,000 after int. at 5% on 1st Mtge. of $150,000	
					Amount	Per Cent	Amount	Per Cent
$15	$32,500	$3,250	$29,250	$17,500	$11,750	4.7	$ 4,250	4.3
16	35,000	3,500	31,500	17,500	14,000	5.6	6,500	6.5
17	37,000	3,700	33,300	17,500	15,800	6.3	8,300	8.3
18	39,500	3,950	35,550	17,500	18,050	7.2	10,550	10.6
18½	**40,500**	**4,050**	**36,450**	**17,500**	**18,950**	**7.6**	**11,450**	**11.5***
19	41,500	4,150	37,350	17,500	19,850	7.9	12,350	12.4
20	43,500	4,350	39,150	17,500	21,650	8.7	14,150	14.2
21	46,000	4,600	41,400	17,500	23,900	9.6	16,400	16.4
22	48,000	4,800	43,200	17,500	25,700	10.3	18,200	18.2
23	50,000	5,000	45,000	17,500	27,500	11.	20,000	20.
24	52,500	5,250	47,250	17,500	29,750	11.9	22,250	22.3
25	54,500	5,450	49,050	17,500	31,550	12.6	24,000	24.

*Assuming that a first mortgage of $150,000 at 5% can be placed on the property, the yield on the equity @ $18.50 per room is 11.5% before depreciation, which is reasonable.

after depreciation on the equity, over and above a 60% mortgage at 5% interest. This return is fair and will allow for an economic yield on any "secondary financing." In the final analysis, an active real estate market will result in a revival of such financing. After all, buyers willing to invest 40% cash in a property are limited and the yield from a property should be sufficient to pay an adequate interest rate, say 7½% and 8% paid on second mortgage. The following table shows the variation in the income return at different rent levels. At $22 to $25 per room per month the yield should be very attractive and would probably result in a rapid increase of building.

In setting up these "standards," land costing $300 per front foot is used. Land of higher value in better locations should develop a correspondingly higher rental for the superimposed building. The following table shows the gross rent that must be obtained at various costs of the land to produce the equivalent yields of our "typical" property.

The following information can be deduced from a study of our "typical" six (6) story elevator building. The writer prefers the "per cube" to the "per room" figures. Unless the ratio of the rooms to cubical contents is the same as in our typical building (viz: about 3,200 gross cubic feet per room) the "per room" data is not dependable.

Effect of Variation in Value of Land on Gross Rent per Room Necessary to Effect Same Yields on Investment.

	Land Per Front Foot				
	$200	$300	$400	$500	$600
Operating Expenses	$ 8,700	$ 8,700	$ 8,700	$ 8,700	$ 8,700
Fixed Charges	7,600	7,800	8,000	8,200	8,400
Reserves for Replacements	1,003	1,003	1,003	1,003	1,003
Amount necessary to return Investment in building and pay 7.5%	16,872	16,872	16,872	16,872	16,872
Interest on land value @ 5.5%	1,375	2,063	2,750	3,438	4,125
NET RENT REQUIRED	$35,550	$36,438	$37,325	$38,312	$39,100
Approximate Gross Rent to Produce Above Net Rent					
Gross Rent	$39,500	$40,500	$41,500	$42,500	$43,500
Allowance for Vacancies	3,950	4,050	4,150	4,250	4,350
Net Rent	$35,550	$36,450	$37,350	$38,250	$39,150
GROSS RENT PER ROOM*	$18.08	$18.54	$19.00	$19.46	$19.92

*Every $100 difference in the front foot value of the plot results in a difference of about 50c in the gross rent per room per month.

SUMMARY OF "THUMB RULES"

	Per Cube	Per Room	Per Fr. Ft.
Cost of Building—125x100 —$212,500	36c	$1170	$1700
Annual Operating Costs	.015	48	
Annual Fixed Charges	.013	43	
Total Annual Fixed and Operating	.028	91 or 7.60 per month	

Coal Consumption about 55 tons per 100,000 cubic feet.

Annual Renovating Cost about $11.50 a room.

Ratio of operating expenses to the gross income—21.5%.

Ratio of total fixed and operating cost to gross income—40.7%.

Overall Capitalization Rate for net income—7.6%.

Overall Capitalization Rate for gross income—16.2%.

In conclusion, it must be remembered that no two properties are exactly alike and that proper allowances and qualifications should be made in comparing our "typical" building with actual cases. Rules, tables, and formulae are never substitutes for sound judgment, and are valuable only as the humble servants of the trained and experienced.

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Landscaping As an Offset to Depreciation

By FRANK M. EDWARDS

THE new home owner, coming into town on the 8:17, was in an unusually expansive mood as he dropped down by an old friend and began: "George, the new house is finished and Mary and I are very happy with it. Believe me, we took no chances—placed the whole thing in the hands of a competent architect and interior decorator, and they were on the job from start to finish. It cost us a little more—but it was well worth it. We moved in the first of the month and the results are all we had hoped for and more. You must come out and see it soon."

"Fine," was George's reply, "I'm anxious to do so." However, being an appraiser of wide experience he instinctively desired more information and continued, "But what about the landscaping. Who is doing that?"

"Well, we haven't given that much thought," his friend shrugged. "I did talk to a man out there who runs a nursery and think I will have him put in some shrubs. They say he doesn't charge much. Grass is grass, you know. We thought we might put in some bridal wreaths and a few barberries to set the home off a little. But we've spent too much already without going in for unnecessary trimmings."

—And that is the too frequent picture of the new home owner—the typical American viewpoint that stultifies our better class of residential development. Is it any wonder that, in many instances, not only a single residence but entire subdivisions begin to depreciate rapidly from the time they are completed if they lack the compensating enhancement in value which might be effected by proper landscaping?

Any analysis of landscape development, of course, necessarily must follow the consideration of many other factors. Has good judgment been shown in locating the subdivision? Is it unfortunately situated between two industrial areas and cursed thereby with the accompanying nuisances of smoke and dirt? Are there zoning and building restrictions that protect the home owner from neighbors who might elect to construct less desirable dwellings. Has it available adequate and convenient shops, local improvements, and transportation? In short, are all basic factors present that underlie permanent residential stability and value? *The finest landscape gardening will not offset any of these fundamental errors.*

If, however, a residence is situated in a properly zoned subdivision—if it is built of permanent materials and is well-designed—if proper safeguards are established for the neighboring development, then well-planned and executed landscape gardening should offset depreciation to a very substantial degree. A well-studied development may, through appreciation, equalize structural deterioration for many years after the building has been erected.

THE LANDSCAPE ARCHITECT

Now, what are the steps necessary in order to stabilize residential values through landscape development? First, the landscape architect. Logically he should be engaged at the same time as the architect who is to design the structure—in fact *his* is the first job. If properly trained and qualified, he would assist in the selection of the site itself; he would not only visualize its immediate possibilities, but would think far ahead in comprehending the stabilization of values in the future

through the very appreciation that he will be instrumental in creating.

Yet your landscape architect must not be a visionary artist in the narrower sense, he must have a sound economic viewpoint and be trained in the practical requirements of home building and capable of coordinating his ideas with those of others who are to carry the major burden of the construction. Nature is to be his most important workman and will be "on the job" long after all of the others are through. Since the landscape architect deals with growing things, the materials he works with and the specifications under which they are installed take on a far greater significance than the mere initial installation. Behind it all is the practical knowledge that is to make the landscape development pay for itself and perhaps carry a bit of the other burden.

THE LANDSCAPE DEVELOPMENT

With a general plan completed, the first physical consideration is that of grading. Without correct slopes to harmonize with the type and design of the house itself, the entire scheme may fail. Natural grading lines are usually the most pleasing and are therefore recommended under all ordinary conditions. If there is no reasonable excuse for a curved walk or drive—it had best be made straight.

And then the lawn. Man can, and does, fool man; but when he attempts to fool Nature, Nature wins! "Short cuts," such as improper soil preparation for lawn or planting areas, simply will not work out. Seed at ten or fifteen cents per pound will produce a beautiful crop of weeds, timothy, and quack grass. It will cost less in the long run to pay fifty to sixty cents per pound for good seed in one hundred pound lots, invest in several inches of rich top soil for a seed bed, and have it consistently watered for the first Summer. *A good turf is fundamental to permanent value;* furthermore, good planting and poor grass never "get by" the analytical feminine inspection should the residence be up for sale.

What of the trees? Good trees, which are permanent, increase in value in almost geometric proportion from year to year. If, through good fortune, mature trees are already a part of the property, it is well worth the investment to put them in the best possible condition—to see that there are no cavities starting in the main branches or weak crotches which are apt to split. Research, during the past ten years, has disclosed that trees may be undernourished due to a lack of nitrogen, phosphate, potash, or mineral salts, or to soil of such density that moisture cannot reach the fine feeder roots. Existing and desirable trees, therefore, even though in some stages of decay, can be saved by proper feeding and their value increased accordingly. A fine spreading elm may be worth $1,000.00 to a large new residence, but it would probably be worth even more if encouraged to grow naturally and properly.

THE PICTURE OF THE GARDEN

In undertaking our landscape development the order is somewhat different than it would be for the architect who designs the home. Certain of the framework is already in place, such as the lay of the land, the existing trees, and other natural raw or partially finished materials. The design, of course, is of paramount and parallel importance. The architect submits a perspective of the residence before construction is undertaken, presenting a clear picture in advance as to how it will look when completed. Then why not do the same with the planting? A thousand people will see the landscaping of your home, whereas only those whom you know will see the interior.

The "plan" for a garden that would be successful cannot be drawn without studies in perspective any more than it can for the home itself. In complex problems three-dimensional studies through models may often be desirable to attain the best results.

If the property is ultimately to be offered for sale or appraisal, the first impression created by the beauty of the grounds is of great importance—therefore the landscaping must strike a truly harmonious note. If the architect has designed a residence of unquestioned formality, the landscaping should carry out the formal lines. In connection with this type of home, particularly if situated in the latitude of the Great Lakes, it is necessary to utilize evergreens in maintaining the formal setting during the winter, since there are at least five months in the year when most of the deciduous trees and shrubs are defoliated. For this reason at least thirty-five per cent of the cost of landscape planting for the formal type of residence, should be invested in good varieties of evergreens. The informal house requires planting beds of curved lines and fine textured shrubs, such as tamarisk hispida and other plants of a more informal character in keeping with the style of the home. Curved walks and possibly private drives may be laid out with propriety in many such cases.

THE COST AND VALUE OF TREES

To illustrate how rapidly trees enhance in value in a few years, one shade tree popular throughout the United States and one evergreen universally admired have been selected and comparisons made in the following tabulation. Prices quoted are for stock of unquestioned quality and are based upon cost in place, including planting under normal conditions, with guarantee of growth:

THE AMERICAN ELM

(A deciduous tree)

Diameter of trunk 8 inches above ground	Age	Cost in Place
2½-3″	8-10 years	$ 7.50
3 -4″	11-14 years	15.00
4 -5″	15-17 years	30.00
5 -6″	18-20 years	60.00
6½-8″	21-25 years	110.00

The specifications quoted for the American Elm are applicable to the region of the northern states such as Wisconsin and Minnesota. In Alabama, for example, the time required for production would be only half that required in Wisconsin.

THE BLUE SPRUCE

(An evergreen)

Data refers to the choicest types, the grafted Moerheim's and Koster's. Seedlings mature earlier.

Height	Age	Cost in Place
6-10″	3- 4 years	$ 4.00
12-15″	5- 7 years	8.00
15-24″	8-10 years	10.00
2- 3′	11-13 years	15.00
3- 4′	14-16 years	20.00
4- 5′	17-18 years	30.00
5- 6′	19-22 years	60.00
7- 8′	23-26 years	95.00
8-10′	27-30 years	125.00
	31-35 years	150.00

Prices given Blue Spruce are averages from several companies which have been producers of quality trees. Such trees are hand root-pruned every year or two to develop extensive fibrous roots, and top-pruned to hold back the height and produce a more compact and shapely specimen.

The *value* of these trees may be much greater than the cost given. Particular specimens may be of unusual beauty; they may be grouped in settings of unique character; or they may be planted in special soil and fertilizer and with a high degree of skill that might considerably increase their intrinsic worth. Where trees are of value for some special purpose, such as screening out unsightly views and have been damaged beyond recovery by reason of a neighbor's fire, Court decisions have

been quite general in allowing plaintiffs more than the bare cost of replacement. Such trees are very often planted in rows as a permanent screen and are difficult to replace with others of mature size and similar value. The Wisconsin Supreme Court within the past two years upheld a Milwaukee County Circuit Court Appeal which had awarded substantial damages above the current replacement costs of the trees as growing trees in a nursery.*

AN OFFSET TO DEPRECIATION

Let us assume a practical example to illustrate the possibilities involved in the adoption of a balanced landscape program. A substantial modern residence is constructed at a cost of $12,000.00 on a lot 75 feet by 140 feet, costing $4,000.00—an investment of $16,000.00. Five per cent of the cost, or $800.00, would be a reasonable allowance with which to produce a properly balanced landscape structure, making a total initial cost of $16,800.00.

The previous tables covered two typical trees, and indicated the important bearing that age and growth have on the cost of landscaping. Assuming that moderate sized trees were planted, the increased cost of replacement over a period of about ten years would be approximately four times the first cost. This ratio would not hold uniformly on all landscaping, of course, but it might be a conservative estimate of the whole. At the end of ten years, assuming normal depreciation of the structure at 2½ per cent per annum and disregarding any appreciation in land value, the set-up might well be indicated in the following:

	First Cost	Depreciation	Appreciation	End of 10 Yrs.
Land	$ 4,000			$ 4,000
Structure	12,000	$3,000		9,000
Landscaping	800		$2,400	3,200
Total	$16,800	$3,000	$2,400	$16,200

The $3,000 in depreciation would be largely off-set by the $2,400 in landscape enhancement, and in many instances the landscaping might increase the total value still more and actually off-set all depreciation. As a matter of fact a theoretical depreciation of 2½ percent per annum on the building might be excessive, at least for the first ten year period, and therefore the actual enhancement may well off-set the existing depreciation.

In residential development, landscaping is typically of an aesthetic rather than a utilitarian nature. As a proper setting may add to the beauty of and increase the desire for a fine painting, so may proper landscaping add to the attractiveness, the salability, and the value of the home.

*Citation-207 Wis. 688; 242 Northwestern 137.

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The Appraisal of Warehouses

By B. C. BURCHFIELD

WAREHOUSES provide housing for goods. No consideration of amenities enters the valuation process. A warehouse is a facility offering a service in a competitive market. The appraiser must deal with economic considerations, and substitute research and comparison for guess work and imagination.

The typical warehouse is used by a distributor-jobber, wholesaler or retailer—to store goods pending resale and transhipment or delivery. The total cost of storage and transportation determines the choice of warehouse space, its kind, amount, and location.

The use to which a property can be put determines its value. This is particularly true of warehouses. They constitute a link in the chain of production and distribution of goods.

WAREHOUSES ARE INVESTMENT PROPERTIES

Most typical warehouses are built for investment and leased to industry. The owner is primarily interested in rents and expenses. He builds or acquires a property as a source of revenue, depending on continuous occupancy, at a fair rent, to provide this revenue.

Tenants for warehouses look to the total cost of operating, including rent, insurance, delivery costs, and advertising value of location and arrive at a maximum rent they are willing to pay on a comparative basis.

If a warehouse is located in the center of a city, the delivery costs will be low. On the edge of the city, the delivery costs will be excessive; and rents will have to be correspondingly lower to justify such a location.

If a building is equipped with an automatic sprinkler system, this will reduce insurance on commodities in storage. Lack of a sprinkler system will increase the insurance rate, and justify a correspondingly lower rent.

OWNER OCCUPIED WAREHOUSES

Buildings built for a special use suffer obsolescence when thrown on the open market. If the appraiser is determining the fair "market value" of a property, he must write off this obsolescence. If he is determining the value to the concern for which the property was constructed, then the replacement cost of an equally desirable property will govern.

Where market value is sought, the appraisal problem is the same whether a building is occupied by the owner or a tenant. The most reliable approach is the analysis of income.

TYPICAL BUILDINGS

There are many types and kinds of warehouses, but the so-called "standard warehouse" is a building with a railroad spur on the rear and a street on the front. It will have either a reinforced concrete or heavy wood floor at car door level; concrete, brick, hollow tile, or sheet iron walls; and a steel or wood truss roof, with ceiling height of from 12 to 16 feet. It may or may not be sprinklered. It may contain from 1,000 to 100,000 square feet, or more.

It may be one or more stories high, but will usually be only one story high, except in the case of close-in buildings on high priced land. It may be from 30 to 1,000 feet long, but will usually be between 100

and 150 feet from the railroad to the street.

It will be located near a through street, but should front on a private street, or one on which there is little traffic to interfere with trucks loading and unloading.

DESIGN

A well-designed warehouse offers the maximum possible ease for handling and storing goods. Goods are usually moved from railroad cars by hand trucks, so the distance from the point of unloading from cars to the point of loading on trucks (or visa versa) should not exceed 150 feet.

The building should not have too many posts. Twenty feet on centers is the minimum spacing. There should be plenty of windows and sky lights for light and ventilation. Truck doors or a loading platform should be located on the street. Ample office space, convenient toilet arrangement, and attractive exterior appearance add to the rental value of a warehouse.

The floor is the important part of a warehouse building. It must be smooth, to permit easy trucking. It must be dry, to prevent damaging goods stored on it. It must be strong, to carry a live floor load of usually not less than 200 pounds, and frequently 300 pounds per square foot.

If the building is large, it should be divided into compartments of not less than 20,000 square feet by fire walls. This reduces the fire risk and the insurance on the building and on goods in storage.

COMPETITION

There are many standard warehouses in every large American city. These buildings are a sort of yard stick that tenants use in their choice of storage space. The appraiser must use this same yard stick in measuring the relative desirability of the subject property. If he is not familiar with this kind of property, he should seek the opinion of a warehouseman, who knows the problem of storing and distributing goods.

DEMAND FOR WAREHOUSES

The supply of storage space within a city is relatively inflexible. It can be increased by new construction, but is usually decreased only by depreciation and fires. The demand for space can change with relative rapidity.

The appraiser familiar with economic conditions affecting his city will know whether the trend in occupancy is upward or downward. He can foresee normal growth and expansion. He cannot, however, foresee changes in freight rates, which may render it more or less desirable to store goods in his city. Such changes greatly affect the demand for storage space.

He might anticipate gradual growth in a given industry, but cannot be expected to anticipate a failure in the cotton crop. Such a failure would greatly reduce the demand for warehouses in a cotton concentration point. Nor could he foresee crop reduction programs, crop loan programs, etc., that greatly decrease the demand for storage space in market centers, and sometimes increase the demand for space in production centers.

HAND-TO-MOUTH BUYING

In the 20's factories were running on schedule far ahead of consumer demand. Goods were sold to, and stored by, jobbers and wholesalers months in advance of the anticipated sales to consumers. The trend toward smaller and more frequent purchases all along the distribution line has caused a reduction in the quantity of processed, or partly processed goods held in storage in warehouses. This narrowing of the gap between the date of produc-

tion and the date of consumption of goods has reduced the total demand for storage space for manufactured products. This condition may be temporary or permanent. It has been responsible for the vacancy of many warehouses.

MOTOR TRUCKS

It was necessary for distribution warehouses to be centrally located in 1900. Deliveries were made in horse-drawn wagons. Today motor trucks have widened the circle in which it is economical to locate distribution warehouses. Cheaper land, and much more of it, is suitable for warehouse sites. High land values for warehouse locations are no longer justified. What changes will take place during the next 35 years is uncertain.

BASIS OF ESTIMATE

Appraisers are not presumed to estimate the value of a property at some time in the future. The best they can hope to do is to estimate its fair value today. Certain fundamental economic laws will help somewhat, but measurable facts are the most reliable indications of value. The rental value of a property today can be estimated by comparison. What it will be 5 to 10 years hence cannot be determined. It can never exceed, for long, a fair return on replacement cost. New capital would be attracted and new buildings built if rents reached too high a level. Abnormal vacancy may make rents subnormal. The trend in vacancies will indicate how long such a condition will continue.

The appraisal of an individual property resolves into the estimate of the probable net income the property will earn, the present worth of that income, plus the residual value of the site. It is the analysis of income method, involving the following items:

1. Rental Value
2. Vacancy Allowance
3. Anticipated Revenue
4. Expenses
5. Net Income
6. Present worth of net income.

Rental Value. This is determined by comparison. It may be stabilized, or adjusted for changing business conditions and advancing age.

Vacancy Allowance. Vacancy allowances are largely estimates, even though based on complete vacancy statistics for many years back. If a building is under a long lease to a responsible tenant there is no need for a vacancy allowance.

Anticipated revenue is the amount of rent the owner can reasonably expect to receive for the property.

Expenses include taxes, insurance, maintenance, repairs, alterations, management, and any other items of expense that the owner will be expected to pay.

Net income is the return the owner receives on his investment. The return will be presumed to include the amortization of the cost of improvements since the improvements have a limited life, and must be written off during their productive existence.

The present worth of the net income is the actual value of the property as an investment.

CAPITALIZATION RATES

There can usually be found some investors with warehouse sites who would be willing to build for lease to a good tenant. The average rate of return demanded by such investors is an accurate index of the prevailing discount rate or capitalization rate applicable to standard warehouses.

There is a difference between the value of a vacant warehouse and the value of a similar property leased for a long term to a substantial tenant. In the latter case there is no question about the amount of

anticipated revenue. The terms of the lease determine this. There is no vacancy allowance or lease brokerage to be considered. The only uncertainty is the amount of taxes and maintenance. These can be estimated with reasonable accuracy.

The return demanded by typical investors on the land value and construction cost of new warehouses is the rate of return on which the value of the subject property should be based.

VACANCY RISK

If the subject property is vacant, the appraiser should determine why the previous occupant moved out, and why the building is now vacant. He must estimate how long it will remain unoccupied, and how much it will be worth to another tenant. His estimate of rental value is, at best, only prospective income.

The capitalization rate, or discount rate, should be substantially higher in the case of a vacant property because the risk is greater.

CAPITALIZATION OF INCOME

There are several methods of appraising by income analysis. The net income can be treated as interest and amortization on the improvement plus ground rent, or interest, depreciation, and ground rent.

Suppose we are appraising a building that is 10 years old, whose remaining economic life is estimated to be 30 years. The building is modern in design and is properly located. Let us assume, also, that it is a one-story fireproof building containing 50,000 square feet, located on a site having a replacement value of $25,000. The replacement cost, new, of the building is estimated to be $100,000.

Net income (on a long lease) is found to be $10,000. The capitalization rate is estimated at 6½% on improvements and 5½% on land. The analysis by capitalization would be as follows:

Net income before depreciation	$10,000
2½% depreciation on $100,000 (straight line depreciation, to write the building off in 40 years)	2,500
Net earnings on land and buildings	$ 7,500
6½% on replacement cost	6,500
Net ground rent (residual)	$ 1,000

The $1,000 capitalized at 5½% indicates a ground value of $18,181.82. The building value is $100,000 less 10 years depreciation at 2½%, or $75,000.

The appraiser might also look at the problem this way: The building has already been depreciated 25% so the earnings would include 2½% annual depreciation on the original cost and 6½% interest on the present worth.

Six and one-half percent on $75,000 would be only $4,875, which, deducted from $7,500 leaves $2,625 residual ground rent to be capitalized at 5½%, indicating a ground value of $47,727.27.

In either case, the amount of net return on the building remains constant, although the building value decreases each year as the depreciation allowance is deducted.

Discounting net income, using straight 6½% annual discount, the amount of present worth that would be amortized in 30 years, at $10,000 per year, would be $130,586.80. The total value of the property would be estimated as follows:

Present worth of an annuity of $10,000 per year for 30 years, discounted at 6½% per annum	$130,586.80
Present worth of $25,000 (estimated land value at end of 30 years) discounted back to date at 6½% per annum	3,779.75
Present worth of salvage value of building ($1,000) discounted back to date at 6½% per annum	151.19
Total investment value of property	$134,517.74

DIMINISHING RETURNS

None of these methods take into consideration the principle of diminishing re-

turns with advancing age. Rents will probably decline as a building grows older. Taxes may decline. Maintenance cost will increase. The net income from a 30-year old building could hardly be as great as the net income from a new building of the same size on an equally desirable site.

If the appraiser is discounting a series of equal annuities he must be assured that these payments will be as great 20 or 25 years hence as they are today.

The capitalization method makes some allowance for diminishing returns, because the method presumes as great a total return on a $25,000 unamortized balance as must now be received on a $75,000 balance. If the net income, after depreciation, declined 50% there would still be left $3,750 as interest on $25,000 building value and rent on $25,000 ground value.

Net incomes may properly be discounted during the life of an existing lease. Thereafter the appraiser should allow for reduced rents and increased repairs, and estimate his schedule accordingly.

Unfortunately there is little data available on which to base an accurate forecast of rents that would give proper consideration to this principle. Judgment and unclassified experience are the only guides on which to rely.

REPLACEMENT COST

What a property may have cost does not determine what it is now worth. The owner may have paid too much or too little. Its value cannot exceed its reproduction cost by any substantial amount. If present rents bring too great a return, the risk of competition is great.

A leased fee may have a value in excess of the reproduction value of the land and buildings, but this is due to the lease contract. There would then be a tangible asset in the real estate and an intangible asset in the lease contract. When such a condition exists there is still the danger of the lease being broken.

Normally the replacement cost, less accrued depreciation, is a valuable check on the results of the income analysis. An accurate improvement value is necessary if one capitalization rate is to be used for the building and another for the land.

In a condition of normal occupancy, unlimited competition, and a fairly active demand for warehouses the cost of production will determine the value. During abnormal, or subnormal, conditions "anything can happen, and it often does."

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How Should a Municipality Assess a Developer's Property?

By STEPHEN L. ANGELL, M.A.I.

WHERE a developer has laid out a high class real estate development, fully improved the streets, built and sold houses or assisted builders to do so, and still owns a number of the vacant plots, the group of lots owned by the developer is worth less per square foot than the plots owned by the individual owners, and should be assessed at a lower rate than the individually owned lots in the section.[1]

Assessors sometimes have been unfairly criticised for recognizing the foregoing fact and assessing the property accordingly. This statement at first may seem to be inspired by a desire on the part of a developer to secure an unfair advantage in the matter of taxation, but a careful consideration will show that this is not the case, but that the statement is based on sound reasoning, and works to the benefit of the holder of the individual lot and to the community as well. In fact, a failure to understand and recognize this principle is not only unfair to the developer but directly reacts to the detriment of the individual owners and the community.

To discuss the problem it is necessary carefully to consider the statement as it appears in the first paragraph; and to follow that statement, we must proceed with the same understanding of words and phrases.

In real estate, the term "development" is intended to identify a subdivision where the "developers" have made the plots valuable and attractive for use; but the term has been much abused. By a "high class development" I mean a subdivision that complies with the following conditions:

1. The developers are men of experience, integrity, public spirit, and business ability.
2. The project is well-financed.
3. The plan for the subdivision has been made under the guidance of an experienced developer with practical ideas and ideals.
4. The engineering work on the subdivision has been done by an engineer of standing under the guidance of the experienced developer.
5. Plots are as a rule sold only to individuals who intend to erect homes for themselves, or to local builders of established standing who erect well-built homes for sale.
6. The restrictive covenants have been carefully worked out to suit the particular needs of the development and are reasonably enforced by the developer.
7. The whole attitude and record of the developer shows that he is intelligently striving to make a happy community for people to live in.
8. The development is suited in program, layout, and restrictions, to the location, surroundings, and topography.
9. There is stipulated supervision of the houses to be built to insure the use of designs by architects of ability.
10. The developer assumes a continuing interest in the upkeep and guidance of the development until the property is entirely built up.

It should also be noted that this assessment proposal is not intended to apply and probably never does apply to subdivisions that do not essentially conform to the foregoing definition of a high class subdivision. As a matter of fact, in the poorer types of subdivision the plots owned by the individuals are sometimes of so little value that it is not wise for the owners to continue to pay taxes on them. Still, the subdividers may, by advertising, continue to sell lots at a profit to those whose desire for a home or hope of easy wealth com-

1. See "The Appraisal of Vacant Subdivision Lots for Taxation Purposes" by Paul Schlagenhaup in this Journal, Vol. 2, No. 2, page 93 (Jan., 1934.) —Ed.

bined with their ignorance make them easy victims for any glib-tongued salesman.

There are of course many subdivisions that would be classified somewhere between the two extremes. In some sections there are very few high class developments, in other sections there are relatively few poor ones. If we can arrive at a point where there are no poor ones, the financial success of our citizens and the financial position of our communities will be improved. But do not misunderstand me, by "high class development" I do not intend any reference to the amount of money spent on the individual houses, but do intend a strict requirement that the money spent shall be well-spent and in such amounts that the community and the individual homes contribute as much to the happiness of the family as is reasonably possible.

A statement collateral to our proposal is: The purchaser of a single plot in a high class subdivision obtains more value than the purchaser of all the remaining lots in the entire subdivision would obtain in the same plot.

The purchaser of the entire subdivision consciously or unconsciously assumes obligations in regard to the management, control, and supervision of the subdivision, and the burden of guiding the remainder of the development work. The purchaser of an individual plot is entitled to expect the benefits of the management, control, and general supervision of the subdivision by the owners and developers, and their guidance in the control of the future development, while he assumes no responsibility except to live up to the restrictions in developing his own plot in conformity to the established standard of the community.

The purchaser of an individual plot buys it because he wants to use it in the immediate or near future, or because for some reason he believes it is to his advantage to buy it at this time rather than later and therefore does not have to contribute any factor of time utility in connection with the plot, whereas the purchaser of the entire subdivision knows that it will take a period of time to dispose of all of the plots and assumes the responsibility for management of the development, carrying charges, and care of the property until such time as it is marketed.

In addition to the elements above stated, it is a well-recognized fact that the purchaser of a large area of real estate is entitled to secure it for a lower price per square foot than one who buys a small area, just as there is a differential between wholesale and retail prices in other commodities. At the same time one should consider the most distinctive characteristic of land, its immobility, which is closely related to the long period required for the "production" of a development or the retailing of the plots in a high class development—an even longer period of "carry" than is required for other commodities.

There are many processes that contribute to the successful production of every high class development. They may be divided into two groups:

GROUP I. INITIAL STEPS

1. Selecting site.
2. Making a sound financial plan and securing funds.
3. Negotiating for the purchase and arranging for title certificates to plot purchasers.
4. Planning the layout and street improvements.
5. Planning the type of development.
6. Devising the restrictions and various forms that are to establish standard practices for the development.

GROUP II. ACTIVITIES THAT CONTINUE MORE OR LESS THROUGHOUT THE DEVELOPMENT PERIOD UNTIL THE LAST LOT IS SOLD

7. Installing improvements.
8. Improving public or community areas.
9. Guiding the selling program.
10. Supervising the building program by company or independent builders.
11. Developing and maintaining cooperation with municipal officials.

12. Examining and criticising or approving plans for houses.
13. Enforcing restrictions.
14. Adjusting of new comers to the community.
15. Adjusting complaints.
16. Advertising and publicity.
17. Cooperating and helping on resale for plot and house owners.
18. Developing community interest in local government affairs by organization of property owners associations or otherwise.
19. Maintaining physical upkeep of property.
20. Carrying the expense of taxes and capital invested until completion of operation.
21. Furnishing time utility value to the land by holding it until ultimate users are found.
22. Doing or encouraging others to do whatever else will increase the attractiveness of the neighborhood and increase or maintain real estate values.

A real estate development is one of the most technical and complex of business enterprises. If a manufacturer makes a poor automobile, or suit of clothes, it can be scrapped or discarded and forgotten; and he can try again. If he sells them, someone loses some money, but little permanent damage is done. If a developer creates a poor subdivision, whether by ignorance or intent, he spoils a piece of land that cannot be discarded but remains an eyesore, and may damage every citizen of the community for years to come through the economic waste of the land and the increase of the tax burden on other tax payers.

The fact that land in process of subdivision is a commodity is very clearly brought out by William H. Ten Haken, Associate Professor of Real Estate Practice, Marquette University, Milwaukee, Wisconsin, in a very able paper on "Real Estate as a Marketable Commodity"[2] which treats with the economic problems of subdivision. He says in part:

> "When we come to the consideration of the characteristics of the production of urban land, we are treading on controversial ground. There are those who maintain that land is not produced, but is a free gift of nature. However, if we look upon production as consisting of the creation of form utility, time utility, and place utility, we can scarcely deny the fact that before practically any urban site is utilized there is created by someone either form or time utility, or both. Very few parcels of urban land are utilized in their original form, nor do very many escape the transition period between agricultural and urban use. Again, when a site is changed from one urban use to another, time utility is usually created by the owner. Someone must necessarily hold the land when it is first being developed for urban use, and make the necessary changes in its form, such as, grading, draining, filling, laying out of streets, and so forth.
>
> "After all, the production of so-called manufactured products consists of nothing more nor less than changing the form of certain raw materials furnished by the earth. The difference between the creation of form utility in a piece of furniture, for example, and the creation of form utility in a city lot ready to be built upon, is only a matter of degree. Similarly, one who holds a vacant lot until there is a demand for its improvement, or an improved lot in a lower use until there is demand for its higher use, is a creator of time utility no different from that created by the furniture retailer who keeps the piece of furniture in stock until there is a demand for it."

In all questions of taxation it is important to consider not only the standpoint of the one who pays the tax but the municipality that collects the tax and has assumed the responsibility of various services to be supplied during the years to come. An unfair method in assessing may do more harm to the municipality and the other taxpayers than to the particular taxpayer that is discriminated against. There seems to be an attempt in many municipalities to "Soak the developer." This does not particularly hurt those developers whose activities are of no benefit to the community because they do as little as possible, sell by high pressure methods, and get "out from under" quickly. But it does hurt and discourage those developers who are doing a good job from the community standpoint.

The two extremes in sales methods followed by developers are:

1. By high pressure methods or at auction

2. See Part I. Annals of the American Academy of Political and Social Science, Page 21, March, 1930.

sales, plots are sold to any one who can be made to buy on easy terms. After the promised street improvements have been installed and the lots are all sold, the "development" is left to grow.

2. By sound business methods and ethical standards where lots are sold only, or principally, to reputable builders who will at once erect distinctive houses, or to persons who will shortly proceed to build homes for themselves. The subdivider continues to maintain his interest in the property until it is substantially all built up and establishes the development as a happy community of homes.

The result to the municipality of the first method is usually a very slow growth of the community, a heavy expense upon the community for maintenance of streets and utilities disproportionate, because of slow building, to the taxes received and accompanied by a lack of that happy successful community spirit that is so valuable both to the individual and the municipality.

The result to the public of the second method is a more rapid growth, the gradual building up of substantial values representing the benefits of real satisfaction of the residents, the early establishment of a happy community spirit of enduring quality, and the certain increase in assessed values sufficient to carry the full share of municipal expenses as well as the burden of the local facilities.

The fair treatment of the second type of developer tends to encourage that type to operate in the community and results in lower taxes and the building up of a better community.

The result to the owner in the first method is that he quickly obtains the return of his investment and his profit and can go on his way, leaving the municipality and his customers to hold the bag, pay the taxes, and take their gains or losses.

The result to the owner in the second method is a much slower return, often the abuse of unreasonable residents, usually a severe beating on exorbitant assessment and taxation, several years of heavy responsibility in the planning and guidance of the community, but the satisfaction of a job well done if he has been able, sincere, and fortunate.

There is probably no greater injustice done by our taxing authorities than the treatment sometimes accorded the developer of the second type. This comes about through ignorance rather than deliberate intent. The remains of his holdings, some of which will not come into use for five or ten years, are assessed at the same rate as those plots that have been sold during the production period and have reached their destined use.

No development is transformed from farm land to an established community by the filing of a map nor yet by the laying out and construction of the roads. The community comes through a period of years depending upon the times, the ability and policy of the developer, and the location of the property. There seems to be no justice in assessing vacant farm land at one price and then, when mapped, assessing the same property on the assumption that it is well worth the highest price any plot has been sold for.

A group of residential plots which constitute the unsold plots in a subdivision where streets have been improved, has a market value to a developer for retailing. But the highest available use is for the retailing of the plots and not for the use as a site for a single residence.

This market value may be figured by estimating the retail selling price and then deducting allowances for cost of selling; interest on capital; taxes; cost of further improvement; upkeep; advertising; general office expense; time, effort, and skill in guidance of the community; and an allowance for profit on the transaction. Or it may be figured by estimating the cost of

comparable acreage plus the cost of the street improvements with an allowance for benefit or damage on account of conditions in the development. Either method should bring approximately the same result.

The market value of the entire holding for resale purposes should be determined and used as a base, and the assessed value of the property should be fixed at a figure that will bear the same ratio to that value as the assessed value generally bears to market value.

A pamphlet issued by the New York State Conference of Mayors and Other Municipal Officials, Bureau of Training and Research, Albany, New York, 1931, entitled "Scientific Methods and Rules for Assessing Land and Improvements" was prepared "to meet the demands of New York State, City, and Village officials for an effective system for assessing real property at true value and equitably for purposes of taxation"; and contains on Page 3 the following instructions: "Land should not be divided into lots in accordance with a development map, in the assessor's record, prior to the sale. No record of the subdivision should be made in the assessor's record until there is a change of ownership. As lots are sold, the block should be divided in accordance with such sales."

This rule is unquestionably sound and, if followed, results in all of the remaining lots in a subdivision being classed as one holding as they are in fact. In many municipalities, it has been the custom immediately to lay off on the assessment map all of the lots shown on a subdivision as soon as the subdivision map is filed. There might be no serious objection to this if the remaining lots were still assessed as one parcel; but when such a practice results in the lots being assessed individually at prices comparable to the ultimate sales value, the unfairness of the system becomes apparent and oppressive.

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Ethics and Professional Conduct

By HARRY GRANT ATKINSON

ONE of the several distinctions that characterize Members of the American Institute of Real Estate Appraisers is the fact that they are pledged to abide by its rules of professional conduct.

This does not assume that only M.A.I.'s are ethical and competent; for every one knows appraisers, not affiliated with the Institute, who bear high reputations for ability and personal integrity. It does mean, however, that each and every Member of the Institute is definitely pledged to observe and conform to the avowed ideals and principles of conduct published by his profession.

It is pertinent, therefore, that we study these rules in detail in order that we may know specifically just what the Institute recognizes as being the obligations and responsibilities of its Members, to each other, to the profession, and to the public.

It is equally important that we understand the fundamental concepts underlying these rules and the reasons why the Institute considers them of such vital importance.

It is significant that all professions have codes of conduct—and that many businesses have developed them, too. Even before the days of NRA there were more than 100 such codes on record in the office of the International Rotary Club. The reasons why this is true can be traced to fundamental concepts of morality as well as to sound policy in an actual business sense. They are based on a purely selfish dollar-and-cent motive as well as on the broader impulse of being fair to mankind in general. We shall not attempt to explore this particular field of abstraction at this time, but confine ourselves instead to a consideration of the important functions which these rules are intended to serve.

One of the major objectives sought by almost every group that announces a code of ethics is that of professionalizing the vocation in which its members are engaged. The motive behind this objective is to establish the vocation in the public esteem as a profession. If this is accomplished, the members of the group are automatically accorded the goodwill and the confidence of the public. Thus, it is easier to secure patronage, and "sales resistance" is not a problem.

So, unless the public already quite generally recognizes the group as constituting a profession, its activities will include efforts to bring about such recognition. This always involves (1) setting up standards for admission to membership and (2) the development of rules of professional conduct.

These rules are usually self-imposed devices for leading the individual member to conform to the ideals which the public expects him to observe. They thus safeguard the professional status of the group on the one hand, and the public confidence accorded to other members of the group on the other.

It must be clearly understood that no code of ethics is sufficient of itself to change a non-professional into a professional vocation. The ingredients that go to make up a profession must be present. What are these ingredients? Are they present in the profession of real estate appraising? Is real estate appraising a profession? As we consider these questions,

let us note certain relationships they bear to the avowed principles of right conduct —or improper conduct—published by the American Institute of Real Estate Appraisers.

John Maurice Clark says in his book entitled *Social Control of Business*:[1]

> "The professional man is an expert, selling services of guidance to persons who in the nature of the case are not experts . . . moreover their need is peculiarly vital to their well-being."

It is obvious that this is true of a physician. He is an expert; his patient is not—and the patient's need is vital to his well-being. It is true of the relationship between the lawyer and his client. It is true of the teacher and the pupil. It is quite often true also of the appraiser and the persons whose welfare is affected by his opinions of value. The buyers and sellers of fee interests and of leasehold interests in real estate are seldom competent to judge real estate values. The buyers of mortgages and bonds, likewise are not specialists in judging the actual worth of the properties securing the loans. They are *dependent* upon the competency and integrity of the appraiser.

The dependency of the individual served by the appraiser is recognized, either directly or indirectly, in a great many of the several rules of conduct published by the Institute. An example is Article VI, Section 1:

> "It is unethical for an appraiser to issue an appraisal report on a fractional part of a property unless he specifically states that the value reported is invalidated if used in making a summation appraisal of the property as a whole."

The practice to which this refers has frequently led to gross overvaluations and has occasioned severe financial losses on the part of individuals who relied on the values reported. In many cases it has jeopardized the only means of subsistence possessed by widows and orphans.

This provision in the code, therefore, is intended directly as a protection for the dependent member of the public who might be affected by the appraisal, even indirectly. It is also intended as a protection for the profession and for the individual members of which it is composed. Public esteem and confidence are the most precious assets of any profession. This provision is one of many designed to preserve that esteem and confidence.

A learned judge on the King's Bench in England, in rendering an opinion in the case of *Commissioners of Inland Revenue vs. Maxse* in 1919, said in part:

> "A profession in the present use of language involves the idea of an occupation requiring purely intellectual skill or of manual skill controlled, as in painting, sculpture, or surgery, by the intellectual skill of the operator, as distinguished from an occupation which is substantially the production or sale or arrangement for the production or sale of commodities."

It requires no argument or involved explanations to apply this definition to the vocation of real estate appraising. Like most, if not all, of the many definitions of the term "profession," however, this one advanced by the learned Judge does not fully cover the meaning of the term as it is commonly understood.

Let us consider the thought of another member of the King's Bench, quoted from an opinion rendered in the case of *Currie vs. Inland Revenue Commissioners* in 1921:

> "I myself am disposed to attach some importance in findings as to whether a profession is exercised or not to the fact that the particular man is a member of an organized professional body with a recognized standard of ability enforced before he can enter it and a recognized standard of conduct enforced while he is practicing it."

Application of this principle to the

1. Clark, John Maurice, *Social Control of Business*, Chicago, Illinois, University of Chicago Press, 1926. Page 226.

American Institute of Real Estate Appraisers clearly marks it as a profession. Article II of the Institute's By-Laws prescribes the high standards for admission contemplated by the learned Judge's definition. The Institute's rules of professional conduct, as a whole, defines the standard of conduct of individuals admitted to the membership, but let us note in particular the following:

> "Article I, Section 1; 'It is unethical for an appraiser to accept an order to appraise a property if his employment or fee is contingent upon his reporting a predetermined or specified amount of value, or is otherwise contingent upon any finding to be reported."

This rule refers to what is known as an "instructed" appraisal and is not to be confused with contingent fee appraisals, covered in Section 2 of Article I. What is here defined as improper conduct is illegal and immoral as well as unethical. It involves fraud and the basest sort of dishonesty. From the point of view of ethics, it brings discredit upon the profession and indirectly affects the financial interests of other members of the profession by reason of the loss of public confidence resulting from the practice.

Section 2 of Article I provides that:

> "It is unethical for an appraiser retained in cases where damages result from the exercise of the right of eminent domain, or result because of fraud, misrepresentation, etc., to make his compensation contingent upon the amount of, or to fix his compensation as a percentage of, the damages which may be decreed by the court deciding the issues in the case involved."

Employment upon a contingent fee basis is not uncommon in the field of real estate appraising. Likewise, in the legal field. It is a practice that has been defended by some and condemned by others. It has been contended by some lawyers that certain worthy clients without means of paying legal costs would be denied the privilege of legal advice and the opportunity of redress for wrongs and losses suffered unless they were allowed to employ counsel on a contingent fee basis. Some have sought to apply the same reasoning in justification of contingent fees charged by an appraiser. The analogy is not a good one, however. The lawyer does not testify; but the appraiser does testify. The appraiser, therefore, has the greater moral responsibility.

"The contingent fee," says Carl F. Taeusch,[2] "is a euphemistic term, whereby the basis of professional charges is shifted from 'fairness' to 'contractually arranged' thereby enabling the lawyer to charge more than professional decency would countenance." The same thing can fairly be said of the appraiser who follows this practice.

Charles A. Boston branded the contingent fee as "The chief wedge that has tended to break down the honorable tradition of the legal profession."

If such discreditable things can be said of contingent fees in the legal profession where it does appear that there may sometimes be a modicum of justification for the practice, how much more scathing the denunciation that should be accorded them in the profession of real estate appraising.

Of course, it must be admitted that in a given case the fee may well be a fair one—and *can* be in all cases, if the appraiser *succeeds* in disregarding his own selfish interests and really finds a value that is wholly consistent with his honest judgment as to what the property is actually worth. It is contrary to human nature, however, to expect unbiased judgments where self-interest is involved. In such cases the appraiser is always open to suspicion—and not uncommonly a just

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2. Taeusch, Carl F. *Professional and Business Ethics.* New York, N. Y., Henry Holt & Company, 1926. Page 226.

suspicion—that his interest in the fee outweighs his desire to find an honest value.

Let us not forget that the basic reason for this rule is that public suspicion attaching to an appraiser working on a contingent fee basis, however honest he may be, reflects upon the prestige of the profession and tends to vitiate public confidence in the sincerity and integrity of all appraisers. In this case, we have a practice that is not illegal, may or may not be immoral, but is always unethical.

Section 3 of Article I of the Institute's rules of professional conduct covers another type of fee:

> "It is unethical for an appraiser to accept an assignment to appraise a property when such assignment involves a bonus, a favor, or any special inducement other than a fair professional fee for the responsibility entailed and the work and expense involved . . . "

The practice to which reference is made here is known by the uglier name of "bribery." Regardless of how it may be disguised, the practice is branded as improper and unethical and subject to disciplinary action.

We have been saying here that ethics lie at the very heart of professionalism. With this in mind we have been considering whether or not real estate appraising may claim to be a profession. Let us revert to this thought again and note the following from the official journal of the British society known as the Auctioneers' and Estate Agents' Institute, Volume 8, No. 95, November, 1934:

> "The suggestion is that a business man other than a professional man is one whose function it is to promise and effect a specified thing or state of affairs, while it is the function of the professional man to undertake to do and do his best. Thus the contractor who builds bridges is responsible for them answering to requirements of fitness and/or specification; the provision merchant who accepts an order for Cheddar cheese is bound to deliver Cheddar cheese, and so forth; these are business men and not professional men. But those who exercise professions are in different case. The schoolmaster makes no promise that his pupils will pass the examination for which he prepares them; the doctor who adopts the 'no cure, no pay' method of business attracts the attention of the General Medical Council; and I have little doubt that most of my readers have had experience of the client who seeks to treat the legal profession as a business in that sense."

How does this fit in with your ideals of real estate appraising as a profession or as a business? If we accept this as a standard, we must concede it is unprofessional for an appraiser to agree in advance as to the amount of value he will find in a given case.

The following quotations from *Professional and Business Ethics* by Carl F. Taeusch present an excellent background for the consideration of one of the important provisions of Article XIII, Section 2 of the Institute's rules of professional conduct:

> "A profession consists of a limited or clearly marked group of men who are trained by education and experience to perform certain functions better than their fellow men."
>
> "In general the standards of any profession are menaced if the line of demarcation between it and other activities is not clear, or if its members may indulge in highly profitable ventures in easily accessible alternate activities."
>
> "Every man owes it to his profession to indicate clearly what his business is; otherwise he has no right to the benefits accruing to the members of that profession. On the other hand, any profession which fails to insist on the identity of its members must take the consequences. The functions of its marginal and ambiguous members react unfavorably on the profession as a whole."
>
> "It is thus apparent that a prime duty of every profession is to raise its standards sufficiently to admit only the skilled and to exclude the amateur."

In the light of the above quotations, consider Section 2, Article XIII of the Institute's rules of professional conduct:

> "Any oral or written statement by a member with reference to his affiliation with the

Institute that is not specific and exact shall be construed to be professional misconduct under Article VI, Section 2 of the By-Laws, and subject to immediate disciplinary action."

This provision contemplates that the Institute's Limited Members and its Affiliate members shall invariably and under all circumstances designate themselves as "Limited" and as "Affiliates" in any references they may make, either oral or written, to their connection with the Institute. Thus, for example, it is improper for a Limited Member or an Affiliate member when testifying in court to make the simple answer, "Yes," to the question, "Are you a member of the American Institute of Real Estate Appraisers?"

John Maurice Clark has pointed out that the recipient of professional services is dependent upon the one who is serving him and must, therefore, rely upon the competency and the honesty of his servitor. He cannot afford to wait and learn for himself by the trial-and-error method, since the very first mistake may be fatal—the first erroneous or false opinion may lead to disastrous financial consequences. Therefore, the rule of *caveat emptor* does not apply in professions.

Professional services are rendered by professional men *in person*. As a consequence, the professional relationship is characterized by a high degree of sympathy and implicit reliance. Intimate personal service precludes mass or large scale production and makes commercialized methods of selling odious to the public and, therefore, unprofitable, in the long run, to the servitor. This is why it is considered unethical for professional men to conduct advertising and sales campaigns.

It should now be evident that professional rules of conduct are not arbitrary regulations imposed by self-constituted rulers upon an indifferent or tolerant vocational group. They are self-imposed rules of conduct expressive of moral principles deeply embedded in the very fibre of the race. They express the ideals of the public in the group and are imposed by the majority of the group as curbs upon the uncertain impulses of the "marginal" member. They have developed in the flaming fires of controversy, in righteous indignation over inexcusable fatal errors, and as a safeguard against the disastrous consequences of improper conduct within the law.

In no code of conduct is there a single rule that did not grow out of the clash of personal greed against the welfare of the group. Each such code is the profession's public recognition of the fact that human behavior and business relationships extend through a broader and more extensive field than can be compassed by the law. It is, further, a public avowal of the profession's obligation to the public and to its own right-thinking members that it accepts the responsibility for the conduct of its individual members.

♣ ♣ ♣

Appraisal Report

On the Market Value of No. 8155 Ellis Avenue and Nos. 1000 to 1012 E. 82nd Street, Chicago, Illinois

By JOHN B. GREEN, M. A. I.

OUTLINE OF THE REPORT

Letter of transmittal
Photograph of property
Summary of conclusions
Legal description
Highest and best use
City data
Neighborhood data
Zoning
Transportation
Description of site
Description of building
Reproduction cost of building
Interpretation of data
Method of valuation approach
Income schedules
Expense schedules
Contingent liabilities and limiting conditions
Assessed valuation
Analysis and conclusion
Certification
Qualifications of appraiser
Photographs of immediate neighborhood
Lay out of building
Plat of area
Plat showing relation to loop district

Under the educational program adopted by the Institute in presenting Courses in Real Estate Appraisal at the University of Chicago in August, 1935, each student in each term was required to make an appraisal of an actual property. This report has been selected from those submitted, first for its clarity of presentation, and, secondly, for its close conformity with the procedure laid down under the courses of instruction. The report has not been revised in any particular, but is reproduced herewith exactly as submitted by Mr. Green in the thought that it would be of real interest to the membership.—Ed.

August 30th, 1935

The American Institute of Real Estate Appraisers
of the National Association of Real Estate Boards
22 West Monroe Street
Chicago, Illinois

Gentlemen:

In accordance with your request, I have made an appraisal of the three story store and apartment building known as:

No. 8155 Ellis Avenue and Nos. 1000 to 1012 East 82nd St., Chicago, Illinois, and legally described as: Lots 24 and 25 and the South 12½ feet of Lot 26 in Block 130 of Cornell Subdivision in the City of Chicago, Cook County, Illinois.

I have carefully inspected the above described premises and have made a thorough investigation and analysis in order to arrive at an opinion of the market value thereof.

The accompanying report of XX pages contains some data upon which my conclusion is partially predicated. Subject to the contingent and limiting conditions stated in the accompanying report, my opinion of the market value of the property under appraisement is:

NINETY-TWO THOUSAND FIVE HUNDRED DOLLARS
($92,500.00)

I thank you for the privilege of serving you and trust that you will find the report satisfactory.

Respectfully submitted,
JOHN B. GREEN, M. A. I.

JBG:MMS

SUMMARY OF CONCLUSIONS

Estimated gross rental value, 100% occupied	$ 16,980.00
Total deductions	10,320.00
Current rate of net earnings	$ 6,660.00
Reproduction cost estimate, building (new)	$106,400.00
Reproduction cost estimate, land	34,000.00
Reproduction cost estimate, Total	$140,400.00
Capitalized value estimate	$ 92,500.00
Total valuation	$ 92,500.00
Divided into: Land	$ 34,000.00
Building	$ 58,500.00

DATE AND PURPOSE OF APPRAISAL

This appraisal is made as of August 30th, 1935 and is made for the purpose of showing the market value of the property as of that date.

Legal Description: The property is legally described as follows:

Lots 24 and 25 and the South 12½ feet of Lot 26 in Block 130 of Cornell Subdivision, being a subdivision of the West ½ of Section 26, Southeast Section 26 (with the exceptions of the East ½ of the Northeast ¼ of said Southeast ¼), the North ½ of the Northwest ¼ of the South ½ of the Northwest ¼, West of the Illinois Central Railroad and the Northwest ¼ of the Northeast ¼ of Section 35, all in Township 28, North, Range 14, East of the Third principal Meridian, in Cook County, Illinois. Otherwise, known as No. 8155 Ellis Avenue and Nos. 1000 to 1012 East 82nd Street, Chicago, Illinois.

Highest and Best Use: While the

site seems to be adequately improved with the present building, the fact that it will not show a satisfactory return of interest on a building investment of this magnitude is an indication that it is slightly over-improved. It is my opinion that the improvement that would develop the highest land value at this time is a one story store building.

City Data: The City of Chicago is a thriving Metropolitan community, ideally situated and equipped to serve a large portion of the United States, particularly the Middle West, commercially, industrially, and culturally. Its growth from a city of 1,698,000 people in 1900 to 3,600,000 people in 1930 is a testimonial of this fact. Metropolitan Chicago comprises a population of over 5,000,000 people. Its industries are highly diversified and its continued growth and stability seem assured.

Neighborhood Data: The particular neighborhood in which this property is situated, known as Avalon Highlands, is well-developed with a good class of apartments, 12 miles southeast of the Loop.

The neighborhood is about six to ten years of age and is about 90% developed, about 95% of the improvements being apartments of a comparable character. Vacancies in this area in 1934 were about 7%.

The area is flat. The streets are paved with asphalt and there are concrete sidewalks. The alleys are unpaved. All city utilities are installed in the area.

Zoning: Most of the surroundings are zoned for apartment use although the block in which the property under appraisment is located, is zoned as commercial. A small but intensively developed business area serving the neighborhood has been developed here. The zoning of the area is shown by Chart 2 of this report.

Transportation: The main economic reason for the development of this area is the Illinois Central Railroad with a station one block distant providing 23 minute service to downtown Chicago. This is the best transportation afforded in the city. The area is also served by a street car line two blocks away and a cross town street car line three blocks away. Excellent motor highways also serve the area.

People: The population of the area is of a good class of American families, possessed of civic and social pride. This area is considered one of the better residential neighborhoods on the South Side of Chicago.

The average income of the residents is from $2,000.00 to $10,000.00 per year.

Such a residential background as this makes an excellent supporting area for the subject property.

The prospect of an infiltration of an inharmonious type of people, particularly of another race, is, in my opinion, very remote. The nearest negro area at present is over two miles away and on the opposite side of Cottage Grove Avenue, a business thoroughfare.

Schools: The area is served by three public and four Catholic grade schools, one Catholic girl's high school, and one public high school, within 1¼ miles of the property.

Churches: There are two Catholic churches in the area as well as one Protestant church, small and inadequate. Two store rooms are now used as Jewish churches.

The Site: The lot under appraisment is level. It is situated at the Northeast corner of 82nd Street and Ellis Avenue. It has a frontage on 82nd Street of 125 feet, extending from Ellis Avenue eastward to a public alley and having a depth on Ellis Avenue of 74.68 feet.

The property is unrestricted by deed or covenant and is zoned for commercial use.

Looking North on Ellis Avenue. Property in foreground.

Looking East on 82nd St. Property in foreground.

Looking Southeast toward business block across street from property.

Looking South on Ellis Avenue from property.

Both streets are paved with asphalt. The alley is unpaved. There is a 20 foot concrete sidewalk on 82nd Street and an 8 foot concrete sidewalk with a grass plot between it and the curb, on Ellis Avenue.

Improvements (Exterior): The site is improved with a 3 story building of gothic and Normandic architecture with a gable mansard roof over the portion on the street frontages. This is covered with slate on the front and composition roll on the back. The balance of the roof is flat tar and gravel.

There is a Normandic tower on the corner covered by a slate roof.

The construction is of brick, stone, stucco, concrete, and half timbers. The foundations are of concrete. There are copper gutters and downspouts.

The windows are served with half screens and there are awnings on the apartments on the South side.

Basement: There is a basement covering about one-half of the ground area. This has concrete walls and floors. There is considerable difficulty here with seepage of surface water as the alley sewers are above the basement level.

Ground Floor: The first floor is divided into 8 store rooms as shown on Chart 1 of this report. The store fronts are copper and plate glass with leaded glass transoms. The floor is fireproof with a surface of terrazzo, except in the corner store, which is maple. The ceilings are suspended and are plaster on metal lath. Each store is equipped with a toilet and sink.

Upper Floors: The upper two floors are of ordinary construction and are divided into 9 apartments per floor, as shown by sketch Chart 2 of this report. There are 5 2-room and 4 3-room apartments on each floor of a satisfactory layout, although without cross ventilation. The floors are of oak except the corridors, which are of rubber tile and the bathrooms, which are of ceramic tile. The walls are canvased and painted except the bedrooms in the 3-room apartments, which are papered. The ceilings are calcimined. The trim is of painted birch. There are shades at all windows. No fireplaces are in the building.

The plumbing is of ordinary type and the baths contain a built-in tub with overhead shower, a toilet, and lavatory. The bathrooms also have a glazed tile wainscot 4 feet high.

The 2-room apartments consist of a living room with in-a-dor bed, a dining room with pullman kitchen, a hall, and bath. The kitchen is equipped with a sink, gas range, metal cupboards, and mechanical refrigeration.

The 3-room apartments have the same accommodations plus a separate bedroom. There is a good amount of closet space.

The walls between each apartment are 12 inch brick fire walls.

Heating and Hot Water: The building is heated by a low pressure steam heating system with a Herbert boiler in the basement. In each living room and in the outer halls is a McQuay, cabinet type, copper honey comb heating unit with humidifying compartments. All other radiators are of the standard cast iron type.

Hot water is provided by an automatic heater of 1000 gallons capacity capable of heating 800 gallons per minute. It is a submerged tube Bell and Gossett type.

Refrigeration: Refrigeration is mechanical and furnished from a central plant of Peerless installation.

Built-In Features: Each apartment has a built-in medicine cabinet, mail box, receivador and in-a-dor bed. A "Mid-West" incinerator serves the apartments.

Miscellaneous: On the rear of the lot is a concrete court, enclosed with a 7 foot cyclone fence:

REPRODUCTION COST (as of this date)	
Building structure	$ 46,506.00
Interior finish	26,099.00
Fixtures	6,345.00
Plumbing and refrigeration	9,705.00
Heating	8,000.00
Lighting & wiring	2,445.00
TOTAL direct cost	$ 99,100.00
Architects fees, 5%	$ 5,000.00
Taxes during construction	145.00
Insurance during construction	100.00
Interest during construction	2,055.00
TOTAL reproduction cost, new	$106,400.00

The building is now 7 years of age and, in my opinion, has a remaining economic life of 33 years.

INTERPRETATION OF DATA

Inasmuch as the building is not a balanced improvement but rather is a slight over-improvement, the reproduction cost of the improvements is not in accord with the capitalized income value.

In order to determine a value for the land involved in this appraisement, I have contemplated the erection of a hypothetical one story store building on the site, as I believe this type of improvement would impart the highest value to the land at this time.

Such a building, erected at a cost of $39,500.00, calculated to exist for 40 years, produces an estimated net return applicable to the land, which, when capitalized on a 6% basis (which I consider the proper rate for such a risk) gives a resultant land value of $34,000.00.

METHOD OF VALUATION APPROACH

The Income Capitalization Approach with the building made residual has been used inasmuch as I have established a land value.

Table I is a summary of the operating statement, showing the anticipated income and expense during the remaining economic life of the building shown in Table VII of this report.

It is assumed that from the 12th to the 33rd years, there will be a steadily declining income until at the end of the 33 years period, the net income will be only an amount sufficient to return interest on the land alone.

TABLE I—SUMMARY

	1st year	2nd to 6th year	7th to 11th year
Gross effective income	$16,131.00	$17,010.00	$18,360.00
Less operating expenses	6,351.00	5,991.00	6,120.00
Less other expenses	3,120.00	3,325.00	3,550.00
Less 6% on land value	2,040.00	2,040.00	2,040.00
Net Income to Building	$ 4,620.00	$ 5,654.00	$ 6,650.00

By use of a compound interest valuation premise (Inwood Coefficient), with a 7% interest rate, this series of annuities is converted to present worth as shown in Table II.

TABLE II

Present worth of $4,620.00 due 1 year from date	$ 3,983.00
Present worth of $5,654.00 per year for 5 years, delayed 1 year	21,606.00
Present worth of $6,650.00 per year for 5 years, delayed 6 years	18,174.00
Present worth of an annuity of $6,650.00 declining to zero from the 12th to the 33rd year	17,943.00
VALUE OF BUILDING	$61,706.00
Less cost of rewiring the building for separate electric meters and installing new electric refrigerators	3,300.00
TOTAL VALUE OF BUILDING, NET	$58,406.00
Plus land value	34,000.00
TOTAL VALUE, LAND AND BUILDING	$92,406.00 or $92,500.00

Actual present and estimated future income and expense schedules are found in Tables III to VII, inclusive.

TABLE III

PRESENT SCHEDULE OF STORE RENTALS

August 30, 1935

Store	Address	Occupant	Front	Area	Lease Expires	Monthly Rent
No. 1	1000 E. 82nd	Tavern	20′	1200′	2-29-36	$ 150.00
No. 2	1002 E. 82nd	Grocer	14′	840′	1-31-36	85.00
No. 3	1004 E. 82nd	Butcher	16′	960′	10-31-36	100.00
No. 4	1006 E. 82nd	Bakery	17′	1350′	11-30-37	125.00
No. 5	1008 E. 82nd	Barber	17′	1020′	9-30-35	90.00
No. 6	1010 E. 82nd	Shoe Repair	14′	840′	10-31-35	90.00
No. 7	1010½ E. 82nd	Jeweler	11′	649′	5-31-36	55.00
No. 8	1012 E. 82nd	Confectionery	14′	784′	5-31-36	90.00
		TOTAL MONTHLY RENTAL				$ 785.00
		TOTAL ANNUAL RENTAL				$9,420.00

TABLE IV

ANTICIPATED FUTURE INCOME SCHEDULE FOR STORES

Store	1st year	2nd to 6th year	7th to 11th year
No. 1	$ 150.00	$ 165.00	$ 175.00
No. 2	85.00	100.00	110.00
No. 3	100.00	100.00	110.00
No. 4	125.00	125.00	140.00
No. 5	90.00	100.00	110.00
No. 6	90.00	100.00	110.00
No. 7	55.00	65.00	75.00
No. 8	90.00	100.00	100.00
Total Monthly	**$ 785.00**	**$ 855.00**	**$ 930.00**
Total Yearly	**$9,420.00**	**$10,260.00**	**$11,160.00**

TABLE V

ANTICIPATED FUTURE INCOME SCHEDULE FOR APARTMENTS

	1st year	2-6 years	7-11 years
10 2-room Apts. @ $32.50	$ 325.00	$ 375.00	$ 400.00
6 3-room Apts. @ $37.50	225.00	255.00	270.00
2 3-room Apts. @ $40.00	80.00	90.00	100.00
Total Monthly	**$ 630.00**	**$ 720.00**	**$ 770.00**
Total Yearly	**$7,560.00**	**$8,640.00**	**$9,240.00**

TABLE VI

COMBINED FUTURE ANTICIPATED INCOME STREAM

	1st year	2-6 years	7-11 years
Stores	$ 9,420.00	$10,260.00	$11,160.00
Apartments	7,560.00	8,640.00	9,240.00
TOTAL	$16,980.00	$18,900.00	$20,400.00
Less 10% Vacancy and rent loss (except 1st year @ 5%)	849.00	1,890.00	2,040.00
Effective Gross Income	**$16,131.00**	**$17,010.00**	**$18,360.00**

TABLE VII

OPERATING STATEMENT

	1st year	2-6 years	7-11 years
Rental Value 100% occupancy	$16,980.00	$18,900.00	$20,400.00
Vacancy & Rent Loss	849.00	1,890.00	2,040.00
Effective Gross Income	**$16,131.00**	**$17,010.00**	**$18,360.00**
Operating Expenses:			
	1st year	2-6 years	7-11 years
Coal	$ 1,300.00	$ 1,300.00	$ 1,300.00
Gas	250.00	250.00	250.00
Water	600.00	600.00	600.00
Electricity	700.00	100.00	100.00
Street Lights	235.00	235.00	235.00
Shades & Decorating	800.00	910.00	969.00
Janitor	1,260.00	1,320.00	1,320.00
Janitor Supplies & Miscellaneous	150.00	150.00	150.00
Repairs	250.00	250.00	250.00
5% Management Fee	806.00	876.00	946.00
Total Operating Expense	$ 6,351.00	$ 5,991.00	$ 6,120.00
Net Operating Income	**$ 9,780.00**	**$11,019.00**	**$12,240.00**
Other Expenditures:			
Taxes (@ 7.20)	$ 2,050.00	$ 2,255.00	$ 2,480.00
Insurance (See schedule Table VIII)	602.00	602.00	602.00
Reserve for replacements (See schedule Table IX)	468.00	468.00	468.00
Total Other Expenditures	$ 3,120.00	$ 3,325.00	$ 3,550.00
Net Income to Property	**$ 6,660.00**	**$ 7,694.00**	**$ 8,690.00**

The reduction in electricity bill is brought about by the removal of the central refrigeration plant and installation of separate electric refrigerators in each apartment. This involves a re-wiring job and the estimate for such work is:

Re-wiring	$1,500.00
18 Refrigerators	1,800.00
Total Cost	$3,300.00

This item has been deducted from capitalized value of the building as its expenditure was required in order to produce the income and expense statements contained herein. Please note that electricity bills must be paid for by *owners* until present leases expire. The drop in electricity bills has been caused by my proposed arrangement to have tenants assume them.

TABLE VIII

INSURANCE DETAIL

Fire	$50,000.00		$528.00
Tornado	30,000.00		36.00
Liability	10,000.00	$20,000.00	38.00
TOTAL			$602.00

TABLE IX

ANNUAL RESERVE FOR PERIODICAL REPLACEMENTS

Roof	$ 55.00
Refrigerators	150.00
Gas Ranges	63.00
Heating Plant	100.00
Plumbing, Electric, and other equipment	100.00
TOTAL	$468.00

Because of the fact that there appears to exist a slight over-improvement and by the process of assuming the erection of a hypothetical building on the site, I have been able to arrive at a land value, I consider the proper method of approach to

be the "Building Residual," which has been used in this appraisal.

I have carefully checked the history of the property under appraisal and find that for the past few years, it has not been well-managed and consequently has not produced a satisfactory income. The opposite side of the street is producing a far greater rental return and has among its tenants several chain stores. This building, however, taken as a whole, has always had better than average occupancy.

The building has been rather expensively constructed but such construction will, in my opinion, increase its rentability.

The monopolistic character of the small business zone of which this property is a part, should help to maintain the anticipated rent schedules used herein.

MARKETABILITY

Under present market conditions properties of this type do not find a ready market at a fair price. However, it is my opinion, from a thorough study of the factors pertaining thereto, that the property could not be readily sold at a price much in excess of $80,000.00.

The only recent sale found in the immediate neighborhood is a brick apartment building at No. 8127-37 Ellis Avenue. This building contains 32 apartments; 18 4-rooms, 12 3-rooms and 2 basement apartments. This property has recently been sold on a bond holders liquidation sale at $75,000.00 cash. This is not a comparable property as it is purely residential in character.

CONTINGENT LIABILITIES AND LIMITING CONDITIONS

In making this appraisal, it is assumed that the land is vested with a good and merchantable title and that it is free and clear of all encumbrances. It is further assumed that there are no encroachments or overlap of bounderies.

All of the data used in compiling this report were furnished me from sources which I consider reliable and were, so far as possible, checked by me. Their correctness, however, is not guaranteed.

It is assumed that the property will be competently managed during the remaining economic life of the building.

The value reported applies to the complete property as a unit and is not applicable if used in a summation appraisal with other figures.

Your appraiser assumes no responsibility for matters of a legal nature.

No survey has been made of this property at the instance of your appraiser.

No assessments of any nature are found encumbering the property.

ASSESSED VALUATION

The property is assessed for taxation purposes at the present time as follows:

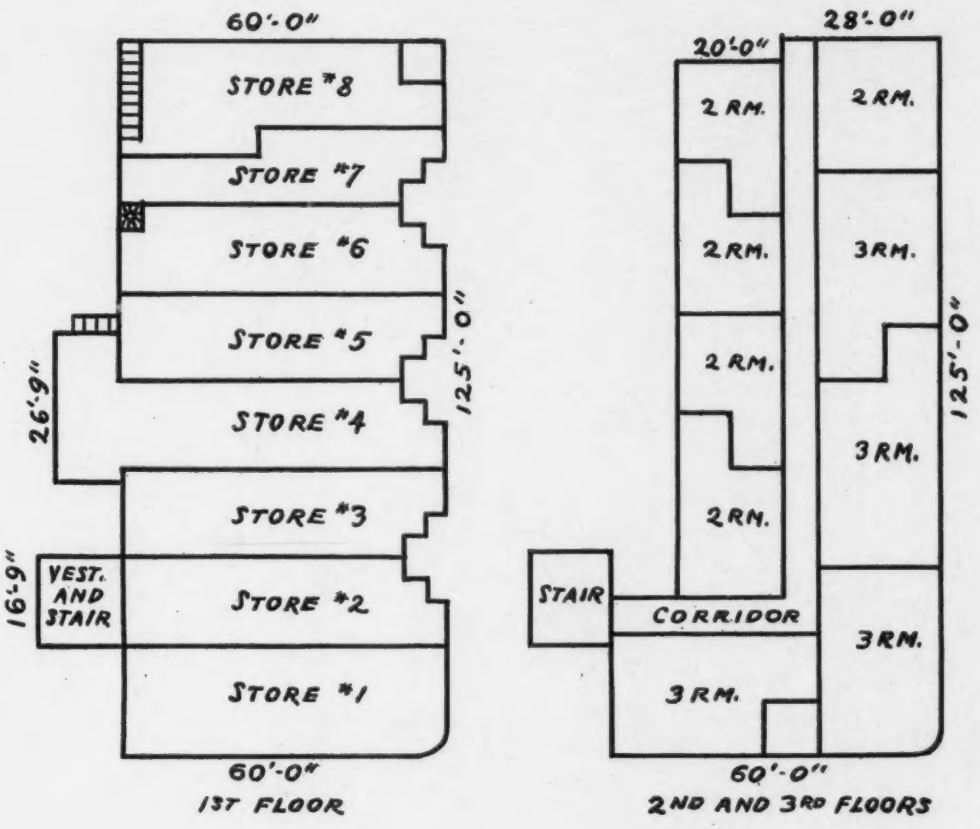
Land	$ 9,022.00
Building	19,463.00
TOTAL	$28,485.00

It is well-known among appraisers that assessments for taxation purposes do not offer a reliable guide to actual values. In this community, however, it is generally considered that the assessed value is approximately 37% of the full cash value. This procedure gives us a resultant figure of $76,986.00.

ANALYSIS AND CONCLUSION

After having made a thorough and detailed analysis of the subject property and the various factors governing its value, I have concluded that the value estimates contained herein are sound and correct.

The fact that under present conditions a



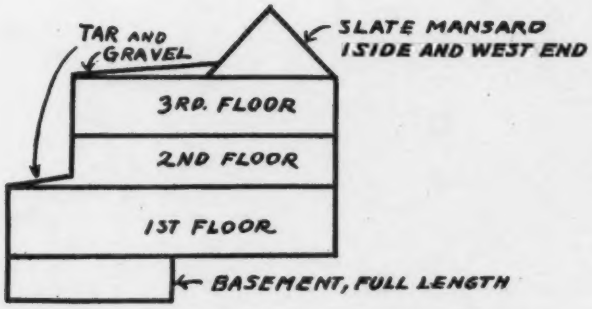
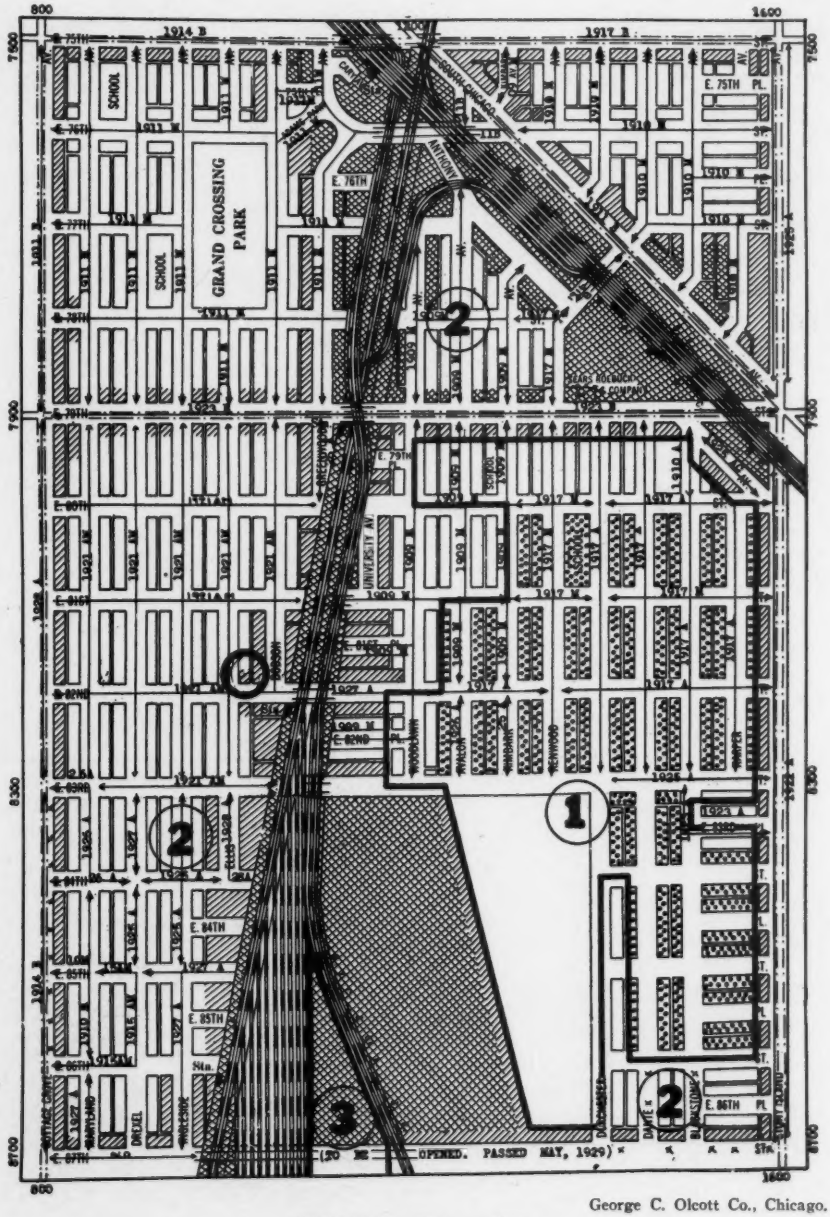


CHART I.—Layout of Building No. 8155 Ellis Avenue, Chicago, Ill.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SCHOOL
E. 75TH PL.
E. 76TH
E. 79TH
E. 80TH
E. 82ND
E. 84TH
E. 85TH
E. 86TH PL.
UNIVERSITY AV
DREXEL
WOODLAWN
KIMBARK
KENWOOD
DORCHESTER
BLACKSTONE
DIVISION
ANTHONY
SOUTH CHICAGO
SOUTH SHORE
COTTAGE GROVE
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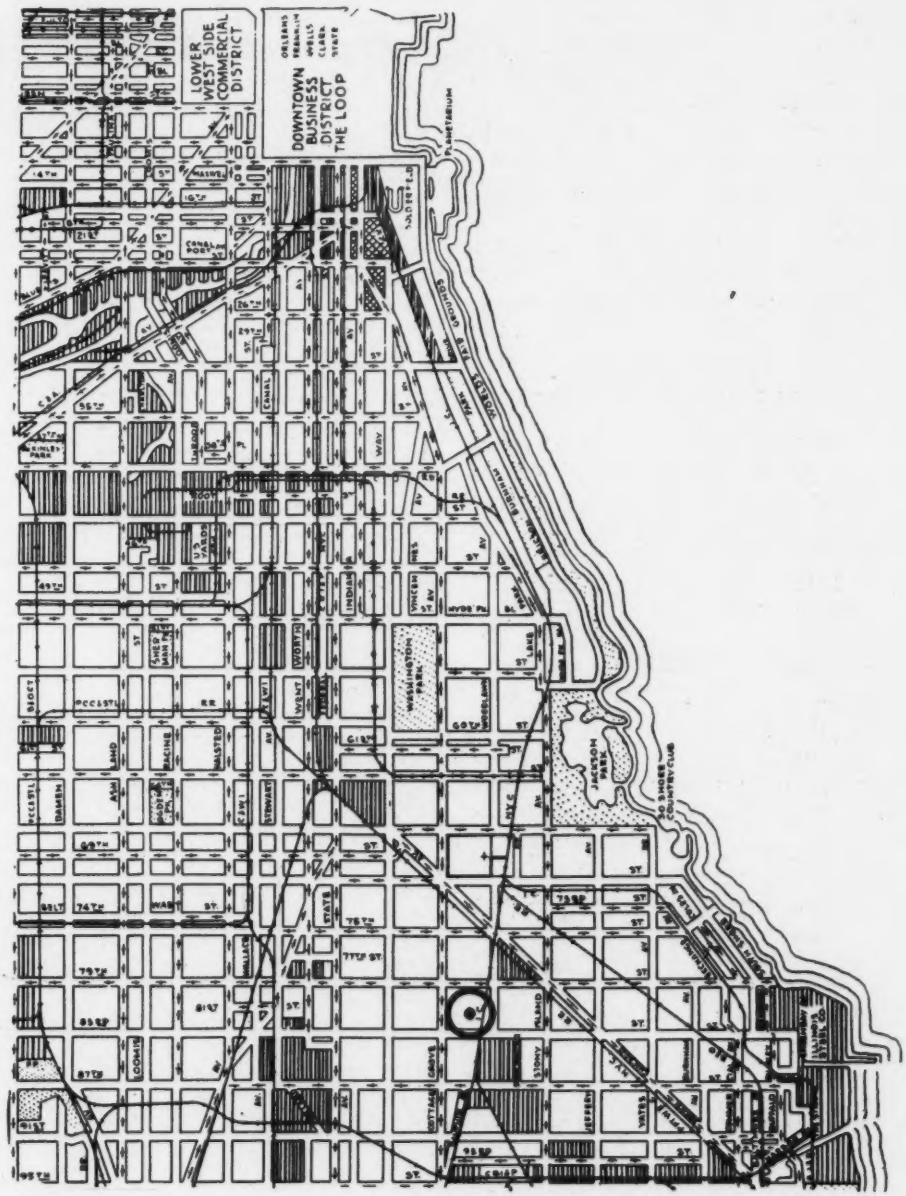

CHART 3.—PLAT SHOWING RELATION TO LOOP
Dot in center of heavy circle indicates property under appraisement.

new building of this character would not earn a sufficient income to return a fair interest on the investment renders the probability of competitive construction rather remote.

The economic conditions at this time, in my opinion, warrant the use of the interest rates used in arriving at the conclusions contained in this report.

In arriving at these conclusions, I have been governed to some extent by the opinions of real estate brokers, trust company officials, other appraisers, residents of the area, tenants, and others with whom I have consulted during the course of my investigations.

The rate of growth of the area, combined with the ability of the residents to pay rents, will in my opinion, fulfill the income estimates contained herein. The market value, as used in this report, is the amount of money which a purchaser would be justified in paying for the property.

CERTIFICATION

I hereby certify that I have carefully inspected the property under appraisement; that to the best of my knowledge and belief, the statements and opinions herein contained are correct, and subject to the contingent conditions mentioned.

In my opinion, the market value of the property, as of August 30th, 1931, subject to the contingent conditions stated herein, is:

NINETY-TWO THOUSAND FIVE HUNDRED DOLLARS
($92,500.00).

JOHN B. GREEN, M. A. I.

QUALIFICATIONS OF APPRAISER

Fourteen (14) years active experience as a real estate broker.

Twelve (12) years active experience as a real estate appraiser.

Member of the American Institute of Real Estate Appraisers.

Member of Florida Chapter No. 2 of the American Institute of Real Estate Appraisers.

Member of St. Petersburg Realty Board.

Has held the following offices in real estate organizations:

President, St. Petersburg Realty Board,

Vice President, Florida Association of Real Estate Boards,

Director, National Association of Real Estate Boards.

Has done appraisal work for:

United States Treasury Department,

Home Owners Loan Corporation,

Reconstruction Finance Corporation,

The Florida National Bank & Trust Company,

The Chicago Title and Trust Company,

The Cleveland Trust Company,

The First Federal Savings and Loan Association of St. Petersburg,

The St. Petersburg Federal Savings and Loan Association.

Has conducted real estate appraisal classes for the St. Petersburg Realty Board.

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An Appraiser's Affidavit

IN THE MANNER OF EUGENE O'NEILL
IN "THE STRANGE INTERLUDE"

By WOODBY X. PERT

Mr. Woodby X. Pert, being duly sworn on oath, deposes and states: *(and thinks):*

—THAT he is an assistant Vice-President of the Allied International Engineering Construction Valuation and Management Corporation of America, *(which title is in fact meaningless and carries with it no executive responsibility whatever; and that in reality he is just an office clerk in one of the Company's Departments, the title being conferred upon him in order that he might sign reports for the Officers of the Company when they wanted to leave early to play golf).*

—THAT he has been continuously in the employ of said the A. I. E. C. V. & M. Corp. of A. for the past 18 years, *(excepting for the period of 15 years and 8 months from June 1917 to February 1932, during which time he was first serving in the United States Army; thereafter working as a street car conductor, canvasser, bond salesman, filling station attendant, and grocer's clerk).*

—THAT he is by education and experience qualified as an engineer, *(having taken 3 years of a course in a Boys' Technical High School; enrolled in an Engineering Course in the National Consolidated Correspondence School and kept up with it until he became too busy with other matters; and worked in a garage for some months during which, in addition to changing oil and tires, he sometimes held the lamp and tools for the mechanic while engaged on many important repair assignments).*

—THAT said, the A. I. E. C. V. & M. Corp. of A. made an investigation of the property of Elaborate Hooey and Company under date of August 15, 1935, and that he was in direct personal charge of said investigation, *(having actually inspected the property one evening between trains as he was passing through the city, although it was too dark to see much and the plant was closed for the day which prevented his going inside).*

—THAT, based upon such personally directed investigation, it is his opinion that the property of Elaborate Hooey and Company was designed for manufacturing purposes and could be successfully operated as a Baloney Factory, *(provided some of the existing structures were torn down and rebuilt along different lines, a power plant installed, and a desirable source of water located; and further, provided the parties desiring to so operate the property had some prospects of getting a sufficient volume of business in view of the three other similar enterprises now serving the market and all reported to be losing money).*

—THAT he has, as the representative of his Company, appraised the property of said Elaborate Hooey and Company, consisting of land, buildings and structures, and machinery and equipment, but exclusive of materials and supplies, merchandise inventory, and other items of working capital; also exclusive of any consideration of goodwill, rights, processes, trade agreements, or other intangible property, said appraisal being made upon the basis of the value of such

property to a going, operating, continuing, profitable concern capable of utilizing such assets as they now exist to their full extent and assuming experienced and competent management, *(but that in his opinion the figures which have been furnished to him as purporting to have been developed from the property in question reflect no consideration of the actual possibilities for use of the property and are not in any manner discounted for the expenditures which might be required in reconstruction and rehabilitation—and are therefore worthless).*

—THAT he has made no estimate as to the working or other capital requirements that might be essential to bringing about a condition of profitable operation, *(although in his judgment it would be much cheaper to buy more desirable land and build a plant, preferably in another city entirely).*

—THAT the appraisal so prepared develops a total cost of reproduction less depreciation of ONE MILLION ONE HUNDRED ELEVEN THOUSAND DOLLARS AND ELEVEN CENTS ($1,111,000.11), *(and that he can understand where the eleven cents may be found, or even perhaps the $111,000.00,—but that the One Million is beyond him).*

—THAT he has no interest, financial or otherwise, in the property nor in the proposed financing; nor is he concerned in any other manner in the results or uses of the appraisal, *(and that he is tickled to death he hasn't; he doesn't want any; and fervently hopes that this statement will be the last time he will ever hear about it).*

—FURTHER,—Deponent saith not.

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Comment and Discussion

Survey of Housing Facilities in Detroit Indicates Need of Home Building

ANALYSIS of population, marriages, and housing units from 1915-1934, inclusive, establishes a growing shortage of homes, with an increasing demand which will tend to raise rents and give an impetus to new construction. Fifty-five per cent of housing units are over 20 years old. Reports show average vacancy of 3.8 per cent.

When I assumed the Presidency of the Detroit Real Estate Board it was apparent to me at the outset that some study should be made that would furnish intelligent information regarding the housing situation.

At the outset I wish to state that I am not expressing my own opinions or ideas, I am only expressing the facts as I find them.

In making this study the writer realizes that the necessity for housing facilities is based primarily upon the increase in population, marriage licenses, and standards of living. In our American cities the population and economic conditions have a very important effect upon the housing situation. If there is a shortage of homes, crowding results, and exorbitant rates are charged by inexperienced owners. If there is an over supply of housing units, the carrying cost causes a loss to the owner and, due to insufficient experience, he reduces the rents because of financial circumstances, causing an unhealthy market. A small portion of vacancies in housing units is, of course, necessary to provide for normal increase in the population, number of marriages, or better standards of living.

Complete Analysis Since 1915

The keeping of records by the Department of Buildings of the City of Detroit was started in 1878. In 1915 a complete analysis was made and since that time was kept of all the housing units and the records showed the following:

Housing units, 1915 total	169,300
Built from 1915 to 1919	51,123
Built from 1920 to 1924	77,980
Built from 1925 to 1929	96,519
Total, Jan. 1, 1930	394,922
Built from 1930 to 1934	7,205
Total Housing units	402,127
Housing units wrecked from 1928 to 1934	1,643
Jan. 1, 1935, Total Housing Units	400,484

Table I shows the age and percentages of housing units.

Table I—Analysis of Age and Number of Housing Units

Type of Building	No. of Bldgs.	20 Years		15 Years		10 Years		1–5 Years		Total	Per Cent
		No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent		
Single Dwellings	181,594	98,865	54.5	37,117	20.4	40,726	22.5	4,886	2.6	181,594	45
Two Families	56,204	70,510	62.8	15,662	13.9	24,692	21.9	1,544	1.4	112,408	28
Apartments	13,776	49,405	46.4	25,201	23.7	31,101	29.3	775	.6	106,482	27
Total	251,574	218,780	55.0	77,980	19.47	96,519	25.52	7,205	.01	400,484	100

SUPPLY AND DEMAND

Supply and demand regulate the price of everything, whether it is real estate or commodities of any kind. Rental property for residential purposes, especially in the City of Detroit, was never predominant over home ownership because it offered one of the poorest investments for private capital. The tenant demands much and returns little, generally leaving the property in ruin.

On account of unemployment and high taxes, hundreds of purchasers of homes on land contract defaulted in their payments and foreclosure proceedings were started, therefore decreasing the value of homes to such an extent that it was cheaper to rent than to own homes, the tenant practically set his own rent, and the owner or agent was forced to accept whatever was offered.

Conditions are now changing. Vacancies are decreasing and rents are increasing materially but today are still 30 per cent to 40 per cent below the peak of 1929. Rents will go up as demand forces them to a much more equitable rate, which the owners are entitled to.

BUILDING INDUSTRY

Recent quotations by economists and statisticians have stated that business conditions throughout the country are almost back to normal, except the building industry. It has also been stated that general business conditions will not again be normal until such time as the durable good business returns or improves.

In the City of Detroit it has been assumed that from 23 per cent to 25 per cent of our working population were engaged during normal times in the building industry.

We are all desirous of a quick return of the building industry and, from a study of the housing situation, it is plainly evident that the building of homes is now necessary in the City of Detroit.

A survey of the housing units in Detroit shows that 55 per cent are over 20 years old, 19.4 per cent 15 years old, 25.5 per cent 10 years of age, and from 1 to 5 years of age approximately 1 per cent.

POPULATION

The population of the City of Detroit showed a steady increase from the year 1923, when it was one million. In 1929 it was 1,600,000, and then it dropped during the years 1930, 1931 and 1932; and during the years 1933 and 1934 it increased approximately 80,000, which shows that the population is on the upward trend.

PERCENTAGE OF MARRIAGE LICENSES TO POPULATION

Year	Population	Marriage Licenses	Per Cent	
1910	465,766	6,618	1.4	
1911	501,138	6,992	1.3	
1912	558,928	8,431	1.5	1.6%
1913	571,464	10,874	1.9	
1914	595,000	11,712	1.9	
1915	673,498	12,256	1.8	
1916	568,746	15,130	2.2	
1917	734,562	16,814	2.2	1.88%
1918	870,000	12,438	1.4	
1919	925,000	17,293	1.8	
1920	997,739	20,514	2.0	
1921	100,000	16,112	1.6	
1922	100,000	17,460	1.7	1.8%
1923	100,000	21,030	2.1	
1924	120,000	19,991	1.6	
1925	124,200	22,132	1.7	
1926	130,000	19,656	1.2	
1927	145,000	16,883	1.1	1.22%
1928	1,565,000	17,863	1.1	
1929	1,634,000	17,946	1.0	
1930	1,568,662	13,082	.8	
1931	1,527,604	13,178	.8	
1932	1,430,552	12,418	.8	.92%
1933	1,483,274	14,079	.9	
1934	1,500,000	19,564	1.3	

The records of the County Clerk's office for marriage licenses in the County of Wayne from 1910 to 1934 show the lowest

number of marriage licenses in 1910, when there were 6,618, but it steadily increased until it reached a peak of 22,132 in 1925 and then dropped to the low in 1932 of 12,418. It then increased in 1933 to 14,079 and to 19,654 in 1934.

Using the factor of 4.14 for the average family and housing units of 400,484 will result in a hypothetical answer for housing facilities for 1,658,003 population (considering that every house unit is habitable and usable), or units in excess of 38,116. Breaking this down further into percentages of different kinds of units gives Detroit a vacancy and units-for-sale as follows:

45%	17,174	Singles or	4.3%
28%	10,685	Two Families or	2.6%
27%	10,307	Apartments or	2.6%
	38,116		

With these facts before us and practically no housing erection for five years, delayed marriages and marriage licenses increasing, population and employment increasing, I cannot see how any student of the housing situation cannot agree that we will be facing a housing shortage soon, if not at present.

REPORT ON DETROIT HOUSING SITUATION AS OF MAY 1, 1935

The impending housing shortage in Detroit, based on a compilation of facts for the years 1910 to 1934, inclusive, has advanced a step nearer the acute stage since that time, according to figures compiled for the first four months of 1935.

Reports received from approximately the same list of large property management companies to whom questionnaires were submitted indicate a vacancy in properties for rent or sale of 2.3 per cent, or a decrease of 1.5 per cent since January 1, 1935.

A comparison of the figures of the previous survey with those of May 1, 1935, is shown in Table II.

Actual reports received from several large real estate offices are as follows:

Apartment buildings reporting	239	
Total units in apartments	4,222	
Apartments vacant	107	
Percentage of apartments vacant		2.5%
Single houses reporting	8,158	
Single houses vacant	372	
Percentage of houses vacant		4.5%
Total apartments and single dwellings	12,380	
Total Vacant	479	
Total vacancies in percentages		3.8%

All reports stated vacancies had decreased in 1934 from 8% to 85%.

All reports stated rentals were increased in 1934.

All reports indicated contemplated rental increases in 1935.

Among those submitting reports as of May 1, 1935, three companies stated that there were no vacancies in 34 apartments of 588 units; two reported no vacancies in 83 flats of 200 units; three had no vacancies in single homes, 338 of which they had under their management, and two reported only one vacancy in 549 and 103 singles, respectively.

TABLE II

TYPE OF BUILDING	NO. OF BUILDINGS		NO. OF UNITS		NO. OF UNITS VACANT		PERCENTAGE VACANT	
	JAN. 1	MAY 1	JAN. 1	MAY 1	JAN. 1	MAY 1	JAN. 1	MAY 1
Apartments	239	201	4,222	3,758	107	106	2.5%	2.8%
Flats (2 to 4 family)	.....	3,734	.....	8,573	...	189	.....	2.2%
Single Houses	8,158	5,005	8,158	5,005	372	108	4.5%	2.16%
Totals	8,397	8,940	12,380	17,336	479	403	3.8%	2.3%

The effect of the housing shortage is reflected in the steady increase of rentals since January 1, 1935, reported by these same companies, ranging from 8 per cent to 21 per cent, or an average of 15 per cent.

TWO IMPORTANT FACTORS

To obtain a proper perspective of the trend in the housing situation, two important factors should be considered in relation to the growing shortage of housing facilities—the marriage rate and the number of new housing units constructed. As pointed out in the previous report there has been a steady increase of marriage licenses issued in Wayne County during the past three years. In 1932, there were 12,418 licenses granted; in 1933, there were 14,079 and 19,564 in 1934. For comparison the following figures for the first months of these years with the same period in 1935 is interesting:

Year	No. of Licenses Issued
1932	3,734
1933	3,288
1934	6,020
1935	6,006

It is fair to assume that this year there will again be in the neighborhood of 19,000 to 20,000 marriages, and assuming that one-half of these new families will need separate housing facilities, it will mean that 9,000 to 10,000 housing units will be required to take care of 50 per cent of them.

BUILDING PERMITS INCREASE

The Department of Buildings of the City of Detroit reports permits issued from January 1, 1935, to April 20, 1935, for 346 new housing units, as compared with 123 in the same period in 1934, or an increase of 223 housing units. However, it must be taken into consideration that during these four months there were 274 housing units wrecked. Therefore, in this period there were provided only 72 additional housing units in the entire city.

THOMAS P. DANAHEY, President,
Detroit Real Estate Board.
Detroit, Mich., May, 1935.

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New Members

ADMITTED TO THE GRADE OF MEMBER

CLOICE D. CARLL, LOS ANGELES, CALIF. Born in Trenton, Mo.; Appraiser for the City of Los Angeles, Dept. of Water and Power; Member Glendale Realty Board; professional territory covers Southern California, The Owens River Valley, and the Mono Lake Basin in East Central California; 8 years' experience in the appraising of real estate; 3 years active experience in the real estate brokerage field in Southern California; holds civil service rating as Real Estate Appraiser; 5 years' experience as Contractor and Builder; Graduate of the short course in property valuation and condemnation procedure of the University of Southern California; completed the Los Angeles Board's course in the Economic Approach to Property Valuation.

LOUIS B. BEARDSLEE, CHICAGO, ILLINOIS. Born in Mt. Vernon, Ohio, in March, 1882; Vice President and member, Board of Directors, Chicago Real Estate Board; Vice President, Int. Fraternity Lambda Alpha; owner and manager, Louis B. Beardslee & Co.; Chairman, Industrial Property Division, Chicago Real Estate Board; manager, Hall Industrial Building and 14-20 North Sangamon Corporation property; active member, Chicago Real Estate Board; professional territory covers U. S. A.; lecturer and author; attended Notre Dame, 1895-1898; has been active in the sale, lease, and appraisal of properties for over thirty years; has served for several years on Appraisal Committee of Chicago Real Estate Board, valuing different types of property; made appraisals of 217 separate parcels of commercial, residential, and apartment properties for Chicago Rapid Transit Company; appraised all properties on Clinton, Jefferson, Desplaines, Harrison, Polk, Taylor, and Roosevelt Road of various types for City of Chicago; twenty-five years experience in appraising real property; qualified in Court as an expert on the values of industrial properties; has appraised for First National Bank, Harris Trust & Savings Bank, Central Republic Trust Co., and other financial institutions.

NEWTON C. FARR, CHICAGO, ILLINOIS. Born in Chicago, Illinois, in 1887; Senior Partner, Farr & Co.; Trustee, Edith Rockfeller McCormick Trust; Vice President and Trustee, A. B. & M. Liquidation Corporation; Trustee, State and Washington Bldg.; Trust Mgr., Park Shore Properties; Trustee, Fairfax Hotel; Active Member and Past President, Chicago Real Estate Board; former Chairman, Brokers Division, N. A. R. E. B.; President Chicago Better Business Bureau, 1931; Member, Executive Committee, Chicago Association of Commerce; Chairman, Chicago Recovery Administration; Secretary, Committee on Public Expenditures; Trustee, Civic Federation; Vice Chairman, Chicago Committee, F. H. A.; Treasurer, Y. M. C. A. of Chicago; professional territory covers Chicago and Cook County; Graduate, Civil Engineering, Cornell University, 1909; served as Engineer with Raymond Concrete Pile Co., 1909-1912; lecturer and author; twenty-three years' experience in appraising real estate, including the valuation of all types of properties typically found in metropolitan areas; qualified in Court as an expert on the values of all classes of real estate; has appraised properties for various financial institutions; engineering and construction experience covers foundations, docks, and miscellaneous buildings; actively engaged in general brokerage business since 1912.

ARTHUR B. HALL, CHICAGO, ILLINOIS. Born in Mt. Vernon, Ohio, in March, 1881; partner, Hall & Ellis; Director, Harris Trust & Savings Bank; Director, La Grange State Trust & Savings Bank; Trustee, La Salle Extension University; Trustee, University of Chicago; active member, Chicago Real Estate Board; Professional territory covers Chicago metropolitan area; Yale University, 1902; completed courses in Real Estate Law and Real Estate Practice in Central Y. M. C. A. School, Chicago; continuously engaged in real estate business in Chicago for thirty-three years; appraisal experience includes the valuation of all types of properties typically found in metropolitan areas with special emphasis on central business properties; licensed Real Estate Broker; qualified in Municipal, State, and Federal Courts as an expert on the values of central business properties; has appraised for the General American Life Ins. Co., the Northern Trust Company, the National Bank of the Republic, and other financial institutions.

PAUL C. LOEBER, CHICAGO, ILLINOIS. Born in Watertown, Wisconsin, in May, 1880; Senior partner, Paul C. Loeber & Co.; Managing Trustee, Leight Trust; active member of Chicago Real Estate Board; professional territory covers central business district and industrial sections of Chicago; author and lecturer; thirty years' experience in the valuation of real estate, including the appraising of industrial, commercial, office buildings, and apartment properties; thirty-seven years' experience as a licensed Real Estate Broker in Illinois; qualified in Court as an expert on all kinds of real estate values; has appraised for insurance companies and other financial institutions.

FRANCIS E. MANIERRE, CHICAGO, ILLINOIS. Born in Chicago, Illinois, in 1884; active member, Chicago Real Estate Board; professional territory covers loop district of Chicago; B.A. Degree from

Yale, 1907; twenty-seven years' experience in the appraisal of real estate, including the valuation of all types of properties typically found in metropolitan areas; has appraised properties for banks, trust companies, and other financial institutions; member and owner of Cooper-Winston-Manierre Trust, which builds and operates properties on North Shore in Chicago.

HYDE W. PERCE, CHICAGO, ILLINOIS. Born in Baltimore, Maryland, in October, 1871; active member, Chicago Real Estate Board; professional territory covers Cook County, Illinois; Chairman, Appraisal Committee, National Life Ins. Co. for Court to value all assets; in charge, Real Estate Dept., Continental Commercial group of Banks in 1917-18; appraiser and expert witness, Board of Education, City of Chicago; Chairman, Valuation Committee, Chicago Real Estate Board; appraiser and expert witness, Metropolitan Elevated R. R. in Eminent Domain Cases; forty-five years' experience in appraising real property, including the valuation of all types of properties typically found in metropolitan areas; qualified in Court as an expert on the values of all types of real estate; has appraised properties for National Life Ins. Co., Chicago Title & Trust Company, and other financial institutions.

LESTER W. PORTER, CHICAGO, ILLINOIS. Born in Chicago, Illinois, in June, 1884; Vice President and Treasurer, Hodge, Nicolson & Porter, Inc.; Vice President, Chicago Industrial Appraisal Co.; past President of Chicago Real Estate Board; member, Executive Committee, Industrial Property Division, N. A. R. E. B.; professional territory covers Chicago industrial district; thirty-five years' experience in appraising real property, including the valuation of industrial, railroad, residential, apartment properties, etc.; qualified in Court as an expert on the values of various classes of real estate; has appraised properties for the Continental Illinois Bank, First National Bank, City National Bank, and other financial institutions.

GILBERT H. SCRIBNER, CHICAGO, ILLINOIS. Born in New Rochelle, New York, in October, 1890; Senior Partner, Winston & Co.; Director, Building Managers Assn. of Chicago; Director, National Boulevard Bank; Director, Terminal National Bank of Chicago; Director, Midland Warehouse & Transfer Co.; Director, Chicago Junction & Terminal Bldg. Co.; Director, Executive Committee of Chicago Real Estate Board; professional territory covers metropolitan area of Chicago; Graduate of Yale University; more than eighteen years' experience in appraising real estate, including the valuation of all types of property typically found in metropolitan areas; qualified in Court as an expert on the values of various types of real estate; has appraised properties for various life insurance companies and other financial institutions.

PAUL STEINBRECHER, CHICAGO, ILLINOIS. Born in Chicago, Illinois, in 1879; active member and past President of Chicago Real Estate Board; in real estate business since 1908 and on his own account since 1911; engaged in general real estate brokerage, management, and appraisal; served as chairman of numerous real estate board committees, including the Appraisal Committee; appointed by U. S. Federal Judge in 1925 as one of three appraisers of downtown school properties to determine rentals on lease renewals and reappointed in 1935 for same position; appraisal experience includes the valuation of all types of properties typically found in metropolitan areas; professional territory covers Chicago and environs.

J. MILTON TRAINER, CHICAGO, ILLINOIS. Born in Harrison County, Ohio, in October, 1867; partner, firm of Clark and Trainer, organized in 1894, real estate dealers and builders, appraisers and financial agents; active member, Chicago Real Estate Board; professional territory covers Chicago and environs, New York City, Newark, N. J., Philadelphia and Pittsburgh, Pa., Cleveland and Toledo, Ohio, Detroit, Michigan, St. Louis and Kansas City Mo., and St. Paul and Minneapolis Minn.; forty years' experience in the appraisal of real property; qualified in Court as an expert on all classes of real estate valuations; has appraised property for life insurance companies, savings, title & trust companies, and other financial institutions; building and construction experience in all branches of building trades involved in the construction of residences, apartment buildings, stores and lofts, manufacturing and warehouse, banks, and office buildings; extensive real estate sales experience; appraisal experience includes the valuation of railroad and industrial properties, office buildings, bank buildings, club properties, department store properties, leaseholds, apartment properties, residential properties, etc.

ALBERT H. WETTEN, CHICAGO, ILLINOIS. Born in Downers Grove, Illinois, in July, 1869; Director, Commonwealth Edison Company; Director, Chicago Title & Trust Company; Director, First National Bank; Trustee, Children's Memorial Hospital; Trustee, Newberry Library; President, Chicago Real Estate Board, 1909; professional territory covers business district of Chicago; forty years' experience in the appraisal of real property, including the valuation of all types of real estate typically found in metropolitan areas; qualified in Court as an expert on all types of real estate values; has appraised real estate for life insurance companies, savings, title & trust companies, and other financial institutions.

Current Articles

The Accumulating Demand for New Construction. C. B. Louden. R. E. R. July 20, 1935, p. 26. $0.70. Includes an interesting chart of contemplated work and contracts awarded from 1920 to date.

Apartment Group Study Experience Exchange. S. M. June, 1935, p. 19. $0.45. Income and expenditures for 174 apartment buildings in 1934.

Building Cost Index Numbers. E. H. Boeckh & Associates. N. R. E. J. July, 1935, p. 48. $1.20. National figures for residences, apartment buildings, hotels, office buildings, commercial, and factory buildings.

Changing Construction Costs. E. H. Boeckh. R. A. R. September, 1935, p. 3. $0.55. By the author of *Boeckh's Manual of Appraisals.*

Construction Costs. Will They Go Up or Down? W. September, 1935, p. 8. $0.45. A symposium of opinions expressed by contractors and material men in the Westchester, New York, area.

The Financial Record of 11 Limited Dividend Companies. R. E. R. August 17, 1935, p. 11. $0.70. Useful in checking cost and operating data of limited dividend housing projects against the record of apartment buildings not under the supervision of the state.

The French Attack on the Housing Problem. Wells Bennett. J. L. E. August, 1935, p. 278. $1.45. "The public housing activities of post-War England and Germany stand first in performance. To the experience of these veterans France now adds her own chapter."

Here Is a New Field for Appraisers. W. L. Leighly. R. E. June 8, 1935, p. 5. $0.30. Opportunities for appraisers in real estate reorganizations.

Home Owners' Loan Corporation Valuation Process. A. A. May. R. E. & B. May, 1935, p. 11. $0.40. Mr. May is State Appraiser of the Michigan Agency of H. O. L. C.

How to Determine the Capital Value. W. R. Kuehnle. R. E. June 29, 1935, p. 5. $0.30. Mr. Kuehnle is a frequent contributor of technical articles to the Journal of American Institute of Real Estate Appraisers.

How to Make and How to Use an Operating Budget. W. J. Shea. B. & B. M. August, 1935, p. 32. $0.45. Of assistance in appraising income property.

Improvement of Housing Standards to Reduce Investment Risk. F. H. L. R. July, 1935, p. 364; and August, 1935, p. 404. $0.30. A series of two articles defining the neighborhood standards essential to safety of investment.

May Survey Shows 26% Average Office Vacancy. G. W. Klein. S. M. June, 1935, p. 8. $0.45. National Association of Building Owners and Managers survey shows office building occupancy increasing. This is the fourth successive gain.

Relative Cost of Material and Labor in P. W. A. Building Construction. H. B. Byer. M. L. R. July, 1935, p. 117. $0.50. Interesting analysis of where the building dollar goes when spent by the Government.

The Risk Rating of Mortgages. A. F. September, 1935, p. 212. $1.20. A new system of rating mortgages developed by Frederick M. Babcock, M. A. I., under the National Housing Act.

Simple System for the Making of Deferred Payments. J. V. Collins. E. August 2, 1935, p. 4. $0.30. Mathematically inclined appraisers will find this solution interesting.

Why Must, and How Does, the Price Level Rise? Ferdinand George. E. June 12, 1935, p. 4. $0.30. Economics in words of one syllable as applied to the real estate market.

The full names of the magazines indicated by initials on these pages are given below:

A. F.	Architectural Forum	Monthly
B. & B. M.	Buildings and Building Management	Monthly
E.	The Economist	Weekly
F. H. L. R.	Federal Home Loan Bank Review	Monthly
J. L. E.	Journal of Land and Public Utility Economics	Quarterly
M. L. R.	Monthly Labor Review	Monthly
N. R. E. J.	National Real Estate Journal	Monthly
R. A. R.	Residential Appraisers' Review	Monthly
R. E.	Real Estate	Weekly
R. E. & B.	Real Estate and Building	Monthly
R. E. R.	Real Estate Record	Weekly
S. M.	Skyscraper Management	Monthly
W.	Westchester Monthly	Monthly

Copies of the magazines in which these articles appear may be secured from the Library of the National Association of Real Estate Boards, 22 W. Monroe St., Chicago, Ill. The price listed includes the price of the magazine and a small service charge for mailing and postage. Subscriptions may also be placed through the National Association.

ROSTER OF MEMBERS

(Figures in parenthesis following names indicate the Certificate Number issued to each Member, and the order of election.)

ALABAMA

Birmingham
John D. Chichester (228).....708 Jackson Bldg.
Frank B. Clark (261).....220 N. 21st St.
Harold M. Henderson (215).....2115 1st Ave.

CALIFORNIA

Glendale
Peter Hanson (11).....221 Arden Ave.

Long Beach
J. Mortimer Clark (50).....262 Lindero Ave.
J. C. Hoffman (71).....307 F. & M. Bank Bldg.
A. G. Maspero (51).....409 Security Bldg.
T. F. Merrick (27).....Heartwell Bldg.

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Ralph Brashear (36).....4157 W. 57th St.
David W. Bush (197).....616 O. T. Johnson Bldg.
Cloice D. Carll (410).....5212 Loleta Ave.
George H. Coffin, Jr. (216).....
.....408 Hollywood Security Bldg.
Ayers J. duBois (107).....7079 Hollywood Blvd.
Arthur L. Layden (104).....417 S. Norton Ave.
Nathan H. Libott (84).....6253 Hollywood Blvd.
Stanley L. McMichael (25)..6785 Whitley Terrace
John W. Salmon (208).....2912 Brighton Ave.
D. D. Sayer, Jr. (278).....4100 E. 9th St.
George L. Schmutz (192)..8703 Santa Monica Blvd.
Charles B. Shattuck (110)..2510 S. Vermont Ave.
Ivan A. Thorson (199).....500 Corporation Bldg.
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W. S. Guilford (46) Athens Athletic Club.....
.....12th & Clay Sts.
James G. Stafford (54).....5820 Presley Way

Sacramento
Mark Cheesman (189).....2964 Govan Way
A. J. Delano (126).....809 J St.
Thomas G. Mapel (367).....809 J St.

San Francisco
George I. Noyes (295).....444 California St.

Southgate
Louis R. Ardouin (205).....2931 Willow Place

South Pasadena
Frank C. Wood, Jr. (326).....1601 Ramona Ave.

Wilmington
Thomas Francis Mason (151).....Box 122

CONNECTICUT

Hamden
Henry Musch, Jr. (157).....42 Thornton St.

Hartford
Joseph P. Kennedy (24).....720 Main St.

New Haven
Charles T. Lincoln (265).....205 Church St.

Stamford
Richard W. Fitch (231).....292 Main St.

Waterbury
George B. Horan (275).....115 Randolph Ave.

DISTRICT OF COLUMBIA

Washington
Frederick M. Babcock.....
.....Federal Housing Administration
Wm. D. Burkheimer (309).....
.....(FHA) 3726 Connecticut Ave., N. W.
Warren S. Dean (313).....(HOLC) 1619 R. St.
Leonard Downie (296).....H. O. L. C. Bldg.
Harold E. Doyle (82).....738 15th St., N. W.
J. W. Graham (83).....(FHA) Vermont & K. St.
Hill Ferguson (242).....H. O. L. C. Bldg.
Joseph A. Herbert, Jr. (69)..1013 15th St., N. W.
A. C. Houghton (72).....909 15th St., N. W.
Morton J. Luchs (178).....1505 H St., N. W.
F. Eliot Middleton (280).....Investment Bldg.
Cuthbert E. Reeves (19).....511 H. O. L. C. Bldg.
R. Marbury Stamp (258).....1421 H. St., N. W.
Charles H. Tompkins (337).1630 Connecticut Ave.
Curtis Walker (196).....Tower Bldg.
Geo. P. Williams (387).....410 H. O. L. C. Bldg.

FLORIDA

Fort Myers
Harry J. Wood (187).....1112 1st St.

Jacksonville
V. M. Covington (48).....1316 Graham Bldg.
Louis R. Fendig (44).....2nd Fl. Buckman Bldg.
Myron L. Howard (73).....516 Professional Bldg.
J. Alvin Register (4).....114 Graham Bldg.
Bainbridge Richardson (59)..117 W. Forsyth St.
Walter D. Shelly (217).....414 Greenleaf Bldg.
L. K. Tucker, Jr. (150).....319 W. Forsyth St.

Lakeland
John L. Wright (243).....117 S. Tenn. Ave.

Miami
Hollis Bush (98).....P. O. Box 1030
Kenneth S. Keyes (115).....13 W. Flagler St.
Adrian McCune (74).....1017 Security Bldg.
D. Earl Wilson (80).....1017 Security Bldg.

Orlando
George F. Brass (160).....P. O. Box 1052
C. W. Rex (42).....Box 293
J. C. Stewart (166).....715 State Bank Bldg.

Sarasota
Fred L. Palmer (127).....482 Main St.

St. Petersburg
John B. Green (308).....11 4th St., N.
Warren P. Hunnicutt (338).....302 Central Ave.

Tampa
Charles P. Glover (139).....
.....811 Citrus Exchange Bldg.

Vero Beach
Frank R. Jewett (143).....P. O. Box Q

West Palm Beach
Frank J. Anderson (223).....215 S. Olive St.

GEORGIA

Atlanta
Bryan M. Grant (147).....206 Grant Bldg.
Robert R. Otis (256).....15 Auburn Ave.

ILLINOIS

Chicago
Graham Aldis (365).....53 W. Jackson Blvd.
Louis B. Beardslee (405).....100 N. LaSalle St.
Kenneth Calhoun Brown (210).110 S. Dearborn St.
Harry S. Cutmore (194)..838 1st Natl. Bk. Bldg.
Dominick Dunn (370).....1330 Morse Ave.
Newton C. Farr (400).....140 S. Dearborn St.
Harry Goldstine (350).....134 N. LaSalle St.
Earl George Gubbins (383).....6015 Lincoln Ave.
Arthur B. Hall (403).....407 S. Dearborn St.
John P. Hooker (52).....140 S. Dearborn St.
A. K. Hornof (173).....1411 1st Natl. Bk. Bldg.
Ward T. Huston (209).....110 S. Dearborn St.
Isaac Keim (324).....2526 S. Wabash Ave.
Arthur Kruggel (341).....4865 Broadway
Walter R. Kuehnle (124).....140 S .Dearborn St.
Mark Levy (9).....7 S. Dearborn St.
Paul C. Loeber (399).....111 W. Washington St.
Ernest H. Lyons (195).....120 S. LaSalle St.
Francis E. Manierre (402).....5 S. Wabash Ave.
Donald T. Morrison (382)..100 North LaSalle St.
William E. Mosby (297).8032 Cottage Grove Ave.
Hyde W. Perce (406).....40 N. Dearborn St.
Lester W. Porter (407).....231 S. LaSalle St.
Geo. R. Quin (191).....36 S. State St.
Gilbert H. Scribner (401).....1st Natl. Bk. Bldg.
Henry George Slavik (301).....10 S. LaSalle St.
Paul Steinbrecher (409).....7 S. Dearborn St.
John Milton Trainer (404)...30 N. Michigan Ave.
Percy E. Wagner (318) F. H. A., 134 N. LaSalle St.
Herman O. Walther (363)..215 W. Wacker Drive
J. Soule Warterfield (120).....8 S. Dearborn St.
Albert H. Wetten (408)....141 W. Jackson Blvd.

Galesburg
Ralph V. Field (168)...203 Bk. of Galesburg Bldg.

Joliet
William W. Mollan (288).....405 D'Arcy Bldg.

Waukegan
Leo Dailey (388).....218 Washington St.
Oscar Soderquist (125).....22 Maple Ave.

INDIANA

Gary
Charles D. Davidson (244).....504 Broadway
J. R. Davidson (123).....504 Broadway

Hammond
George N. Becker (245).....7407 Jackson Ave.
Samuel C. Ennis (203).....1st Trust Bldg.

Indianapolis
George A. Kuhn (35).....706 Guaranty Bldg.

IOWA

Cedar Rapids
John J. Wagner (266)..408 American Trust Bldg.

Des Moines
Arthur S. Kirk (188).....900 Grand Ave.

Sioux City
Willard L. Frost (21).....Security Bank Bldg.

KANSAS

Hutchinson
J. C. McNaghten (116).....1st Natl. Bk. Bldg.

KENTUCKY

Louisville
I. Sidney Jenkins (334)....Louisville Trust Bldg.
Paul F. Semonin, Sr. (359).....321 Starks Bldg.

LOUISIANA

Shreveport
T. S. Neal (224).....330 Ricou-Brewster Bldg.
R. S. Whitten (351).....210 Milam St.

MARYLAND

Baltimore
Oregon Milton Dennis (132).....
W. E. Ferguson (47).....100 E. Pleasant St.
Harry E. Gilbert (18).....2 E. Lexington St.
Albert C. Hofrichter (162)....2 E. Lexington St.
Chas. H. Steffey (88).....336 N. Charles St.

MASSACHUSETTS

Boston
W. H. Ballard (41).....45 Milk St.
Edward F. Cassell (122).....18 Tremont St.
James D. Henderson (169)....209 Washington St.
Norman W. Kenny (10).....82 Devonshire St.
John C. Kiley (397).....45 Bromfield St.
Robert C. Nordblom (336).....18 Oliver St.

Fall River
J. Frederick Beckett (167).....49 Purchase St.
Myer Markell (165).....Granite Block
Everett N. Slade (53).....57 N. Main St.

Lowell
John C. Percival (233).....36 John St.

Springfield
Henry M. Clark (287).....100 Broadway
Bion T. Wheeler (339).....1562 Main St.

Worcester
Maurice F. Reidy (8).....2 Foster St.

MICHIGAN

Detroit
Judson Bradway (392).....533 Majestic Bldg.
Matthew Carey (389).....2200 Buhl Bldg.
George W. Drennan (358)....300 Penobscot Bldg.
Guy S. Greene (394).....300 Lafayette Bldg.
Henry N. Johnson (390)....300 Penobscot Bldg.
Alfred W. Palmer (312).1920 Union Guardian Bldg.
Edmund T. Paterson (385)..3050 E. Grand Blvd.
Leonard P. Reaume (393).....2150 Buhl Bldg.
George C. Sexauer (395).....2150 Buhl Bldg.
Carl S. Wells (391).....2706 Eaton Tower

Grand Rapids
J. G. Lloyd Alexander (246)....616 Murray Bldg.
Isaac Blandford (234)..100 Federal Square Bldg.
Leon T. Closterhouse (247).....
.....American Home Security Bank
John Garfield Emery (304).....
.....205 Federal Square Bldg.
Harry J. Fuller (235)....The Michigan Trust Co.
Walter S. Palmer (193)..104 Federal Square Bldg.
Arent Van Stensel (248).....
.....1006 G. R. Savings Bank Bldg.
Charles H. Warden (229).....
.....535 Michigan Trust Bldg.

Lansing
Edward G. Hacker (291).....228 S. Capitol Ave.

Pontiac
Paul A. Kern (134).....1st Natl. Bk. Bldg.

MINNESOTA

Duluth
Richard W. Northup (379).....17 Phoenix Bldg.

Minneapolis
Norman L. Newhall (32).....519 Marquette Ave.
Edwin L. Somerville (30).....615 Second Ave., S.
J. Frederick Sutherland (331).....
.....1477 Northwestern Bk. Bldg.

MISSISSIPPI

Jackson
J. O. Manning (299).....3012 N. State St.

MISSOURI

Clayton
Gunther Meier (319).....18 N. Meramec

Joplin
Rolla E. Stephens (264).....711 Virginia Ave.

Kansas City
George M. Bliss (360).....17 E. 10th St.
C. F. Curry (345)..... .....921 Baltimore Ave.
E. F. Pierson (289).....311 Commerce Bldg.

St. Louis
W. C. Bernard (91).....317 N. 11th St.
William W. Butts (93).....803 Chestnut St.
Herbert O. Byrd (302).....818 Chestnut St.
Charles J. Daly (94).....801 Chestnut St.
Otto J. Dickmann (225).....623 Chestnut St.
Chester A. Dougherty (249).....109 N. 7th St.
John H. Farish (201).....713 Chestnut St.
Joseph B. Hall (2).....1311 S. 39th St.
Joseph W. Hannauer (15).....811 Chestnut St.
Monroe H. Rodemyer (218).....109 N. 8th St.
N. S. Wood (131).....709 Chestnut St.

NEBRASKA

Lincoln
C. C. Kimball (381).....228 Stuart Bldg.

Omaha
C. D. Glover (67).....1221 City Natl. Bldg.
Lewis C. Sholes (23).....305 Paterson Bldg.
Clinton B. Stuht (33).....Aquila Court Bldg.
Carroll Wright (314).....
.....(HOLC) Woodmen of the World Bldg.

NEW JERSEY

Atlantic City
Maurice A. Kelley (325)...20 S. Tennessee Ave.

Butler
Frank B. Fay, Jr. (171).....Fayson Lake

Camden
Ralph D. Baker (60).....924 Broadway
W. W. Chalmers (63).....4th & Federal Sts.
J. William Markeim (86).....4th & Federal Sts.
Abraham J. Rosenfeld (213)....114 N. Broadway
Leon E. Todd (340).....2623 Westfield Ave.
Philip Zinman (95) .....333 Arch St.

East Orange
Frank H. Taylor (6).....520 Main St.
Harry A. Taylor (108).....520 Main St.

Elizabeth
John K. Leeds (99).....286 N. Broad St.
B. B. Miller (58).....215 Broad St.
J. K. Powell (77).....1143 E. Jersey St.
Burton Thompson (43).....18 W. Jersey
Max Tieger (112).....207 Broad St.

Hackensack
Isidoro Quintana (78).....Court House Square

Jersey City
George E. Dugan (236).....345 Central Ave.
Percy A. Gaddis (22).....Jersey Journal Bldg.
D. E. C. Somers (175).....700 Bergen Ave.

Linden
John Fedor (65).....540 S. Wood Ave.

Newark
Murray Apfelbaum (38).....786 Broad St.
John J. Berry (56).....982 Broad St.

Jos. L. Feibleman (66).....17-19 William St.
Franklin Hannoch (49).....14 Park Place
Louis Herman (70).....60 Park Place
Charles Frederick Kraemer (366)..776 Broad St.
John A. Linnett (85).....29 Elizabeth Ave.
E. J. Maier (75).....988 Broad St.
Joel Schlesinger (87).....31 Clinton St.
Harry J. Stevens (200).....478 Central Ave.

New Brunswick
Jas. A. O'Connell (186).....392 George St.

Ocean City
Elmer Jackson Pearl (330).....311 8th St.

Perth Amboy
Morris Goldfarb (109).....265 Madison Ave.

Ridgewood
Frederick A. Tetor (364)...1 E. Ridgewood Ave.
Samuel S. Walstrum (106).....Ridgewood

Rutherford
Charles A. Van Winkle (113)..1 & 2 Station Sq.
Theodore Van Winkle (117).....1 Station Sq.

NEW MEXICO

Albuquerque
Joseph P. Deasy (377)....925 W. New York Ave.

NEW YORK

Brooklyn
Stephen F. Barrera (133).....191 Joralemon St.
George Baur (170).....2609 Clarendon Rd.
James B. Fisher (57).....160 Remsen St.
George H. Gray (17).....310 Ashland Place
Bernard F. Hogan (29).....451 5th Ave.
Arthur J. Horton (183).....1214 Flatbush Ave.
George S. Horton (184).....59 Lafayette Ave.
Frank M. McCurdy (39).....158 Remsen St.
James F. Matthews (76).....215 Montague St.
M. C. O'Brien (190).....798 Nostrand Ave.
Charles Partridge (92).....397 Flatbush Ave.
Lewis H. Pounds (128).....32 Court St.
Fenwick B. Small (31).....1124 Myrtle Ave.
R. W. Walden (89).....162 Remsen St.

Buffalo
A. P. Allingham (3).....63 Niagara St.
P. V Bowen (141).....1006 Ellicott Sq.
Walter W. Cohn (81).....155 Pearl St.

Jamaica
Armand Brunswick (327).....90-26 161st St.
William F. MacDermott (198)....89-70 162nd St.

Long Island City
Axel John Swenson (272).....41-27 29th St.

Mechanicville
Franz H. Moak (40).....37 N. Main St.

Mineola
R. T. Childs (273).....222 Front St.

Mount Vernon
Robert A. Anderson (259).....34 E. 1st St.
Edward H. Hufnagel (250).....28 E. 1st St.

New York
Herman A. Acker (279).....
.....318 E. Kingsbridge Rd., The Bronx
Edward J. Crawford (373).....225 Broadway
Dalton Granger De Witt (315)..22 W. 48th St.
A. N. Gitterman (45).....45 E. 49th St.
Bracton Goldstone (68).....10 E. 40th St.
Frank D. Hall (159).....393 7th Ave.
John R. Hoyt (290).....17 E. 42nd St.
Robert Huntley (214).....67 Liberty St.
S. E. Kazdin (269).....70 Pine St.
John E. McGovern (316).....552 Riverside Dr.
Samuel Edmund McRickard (292).....
.....400 E. Fordham Rd., The Bronx
Clarence C. Merritt (357).....50 E. 42nd St.
Charles W. Morrison (270).....67 Liberty St.
Irving I. Rosenbaum (179).....384 Broadway
David Vogel (368).....150 Broadway

Rochester
Abraham Berghash (219)....130 Clinton Ave., S.

Scarsdale
S. L. Angell (220).....30 E. Parkway

Syracuse
James H. Dawley (333).....121 E. Genesee St.
Edward Eagan (271).204 Starrett-Syracuse Bldg.

White Plains
Vernon N. Bailey (322).....1612 Main St.
Albert W. Lockyer (294).....Depot Plaza
Edward M. West (305).....Opposite Station

Yonkers
Edward C. Heald (222).....20 S. Broadway
Paul Wegener (90).....2 Hudson St.

NORTH CAROLINA

Asheville
B. H. Sumner (332).....Asheville

Charlotte
S. T. Henderson (20).....P. O. Box 1128

OHIO

Akron
John C. Kyle (102).....520 S. Firestone Blvd.
Fred E. Smith (298).....
.....608 Broad Blvd., Cuyahoga Falls
W. F. Voges (105).....1109 S. Main St.

Alliance
L. D. Scranton (100).....341 E. Main St.

Canton
Mark Hambleton (146).....417 Mellett Bldg.
William J. Uebelhart (97).....419 Mellett Bldg.

Cincinnati
Howard R. Burgess (176).....104 Neave Bldg.
Fred Droege, Jr. (154).....104 Neave Bldg.
J. George Ege (335).....3040 Urwiler Ave.
James W. Farrell (149).....1142 Herschel Ave.
John H. Frey (156).....7 Navara Apts., Sta. D
James J. Grogan (180).S. W. Cor. 5th & Main Sts.
Albert J. Mayer (204)....1515 1st Natl. Bk. Bldg.
P. Lincoln Mitchell (181).....
.....S. W. Cor. 5th & Main Sts.
C. Stott Noble (202).....3428 Slettenius
Russell Price (152)...S. W. Cor, 5th & Main Sts.
Walter S. Schmidt (111).S. W. Cor. 5th & Main Sts.
Lewis R. Smith (139).....409 American Bldg.
John B. Spilker (155).....104 Neave Bldg.
L. F. Steele (310).....209 W. 7th St.

Cleveland
Talmage D. Auble (262).....15509 Madison Ave.
Robert F. Berwald (300)..1220 Williamson Bldg.
Ben B. Beyer (34).....1425 Williamson Bldg.
James G. Bingham (328)..1227 Williamson Bldg.
Raymond T. Cragin (282).825 Natl. City Bk. Bldg.
W. J. Crawford, Jr. (323)...720 Cuyahoga Bldg.
Walter R. Granger (285)..310 Hippodrome Bldg.
Joseph J. Haas (164).....200 Marshall Bldg.
Joseph Laronge (103) .....600 Union Trust Bldg.
Edwin H. McIntosh (283).....
.....1029 Society for Savings Bldg.
Warren L. Morris (251)..420 Natl. City Bk. Bldg.
E. L. Ostendorf (14).....1105 Chester Ave.
Carl A. Palmer (286).....850 Euclid Ave.
Max J. Rudolph (281).....1105 Chester Ave.
Carlton Schultz (37).....1223 Schofield Bldg.
Alexander S. Taylor (142)....1930 Union Tr. Bldg.
V. C. Taylor, II (153)....1930 Union Trust Bldg.
Wm. J. Van Aken (284).....1715 Euclid Ave.

Geneva
J. Earl Miller (267).....Miller Bldg.

Massillon
Charles N. Hostetter (329)..716 Lincoln Way, E.

Medina
Claude L. Baker (129).....R. R. 7

Springfield
H. S. Kissell (5).....927 1st Natl. Bk. Bldg.

Toledo
Claude A. Campbell (211)...707 Ohio Bank Bldg.
Geo. P Crosby (252).....413 Madison Ave.
Howard Etchen (136).....725 Adams St.
Donald F. Hiett (396).....622 Jefferson Ave.

PENNSYLVANIA

Bethlehem
Wm. C. Bader (163).....214 Odd Fellows Bldg.

Erie
Carl G. Wright (361).....204 Marine Bank Bldg.

Harrisburg
Evan J. Miller (148).....213 Locust St.

Lancaster
Harry W. Butts (114).....24 E. Orange St.

Lansdowne
W. Raymond Evans (118)..19 N. Lansdowne Ave.

Philadelphia
Philip N. Arnold (174).....123 S. Broad St.
Boyd T. Barnard (237)....Lincoln Liberty Bldg.

Frederick A. Bond (380).....5433 Baltimore Ave.
E. L. Carlson (62).The Parkway at Fairmount Ave.
C. Harris Colehower (145).....5942 Chestnut St.
Frank P. Felton, Jr. (268).....37 S. 16th St.
Samuel T. Hall (257).....1500 Locust St.
Roy A. Heymann (362).....213 S. Broad St.
C. Harry Johnson (238).....Packard Bldg.
S. Craig Kane, Jr. (253)....511 Land Title Bldg.
Philip W. Kniskern (1).....1614 Walnut St.
J. Howard McLaughlin (372)..5512 Florence Ave.
Maurice R. Massey (276).....
.....S. E. Cor. 13th & Green Sts.
William I. Mirkil (226).....1500 Walnut St.
Robert J. Nash (254).....1214 Locust St.
Richard J. Seltzer (255).....15th & Locust Sts.
J. Willison Smith (239).....100 S. Broad St.
Martin Stotz (55).....514 Land Title Bldg.
Ambrose J. Winder (207).....1420 Walnut St.

Pittsburgh
J. W. Cree, Jr. (13).....211 Fourth Ave.

Scranton
C. G. Chappell (376).....Bliss Davis Bldg.

Wilkes Barre
C. A. Leighton (135).Deposit & Savings Bk. Bldg.
Edward L. Lewith (227)....428 Miners Bk. Bldg.

Providence — **RHODE ISLAND**
Hal Forrester Coombs (172)...211 Waterman St.
James Devine (130).801 New Industrial Tr. Bldg.

Johnson City — **TENNESSEE**
W. H. Prince (374).H. O. L. C., Hotel John Sevier

Memphis
George W. Person (320)..503 Manhattan Bk. Bldg.

Nashville
J. W. Denis (140).....209 Warner Bldg.

Dallas — **TEXAS**
Ballard Burgher (398).....
.....617 Republic Natl. Bk. Bldg.
Henry S. Miller (277)...405 Southland Life Bldg.
Lawrence Miller (386).....2729 South Boulevard
John W. Pat Murphy (384)....1420 Commerce St.

Fort Worth
Meredith R. Carb (354).....2547 Greene Ave.

Houston
W. G. Burchfield (274)..803 2nd Natl. Bk. Bldg.
L. A. Casey (353).....923 Shell Bldg.

San Antonio
Paul W. Adams (355)....South Texas Natl. Bank
A. H. Cadwallader, Jr. (352).....Moore Bldg.
L. A. Casey (353).....317 N. St. Mary's St.
Claris M. Elmore (356).....1031 Navarro St.
R. W. Patton (317).....614 Travis Bldg.

Richmond — **VIRGINIA**
John W. Bates (240).....723 E. Main St.
Henry S. Raab (260).....710 E. Main St.
John Sloan (241).....18 N. 8th St.
J. Guthrie Smith (144).....5104 Riverside Drive
Morton G. Thalhimer (221).....1013 E. Main St.

Seattle — **WASHINGTON**
Nathaniel B. Bender (347)....302 Republic Bldg.
Charles P. Burnett (378).....807 2nd Ave.
Leonard Downie (296).....Seattle
Wm. A. Eastman (307).....414 University St.
Walter G. McLean (346).....1108 Third Ave.
J. C. McQuigg (344).....1910 N. 39th St.
A. C. Newell (348).....448 Dexter Horton Bldg.
Ben J. Smith (343).....5252 16th Ave., N. E.
J. H. Sparkman (349).....1108 3rd Ave.
Cecil S. Van Voris (369).....623 Second Ave.
Edwin G. Wendland (342)..845 Bellevue Ave., N.
J. Arthur Younger (311).....1233 E. 88th St.

Walla Walla
C. C. Conner (263).....First National Bank

Bluefield — **WEST VIRGINIA**
T. O'J. Wilson (293).....409 Peery Bldg.

Charleston
Charles Uhrig (79).....
.....Box 1019, Charleston Natl. Bk. Bldg.

Clarksburg
Lyle B. Hornor (375).....Goff Bldg.

Huntington
H. E. Pilcher (371).....926 6th Ave.

Princeton
S. W. Florence (206).....819 Mercer St.

Madison — **WISCONSIN**
Henry H. Bush (61).....311 State St.

Milwaukee
K. Lee Hyder (185).....525 E. Michigan St.

London — **ONTARIO, CANADA**
Bert Weir (138).....156½ Dundas St.

Toronto
Cyril R. De Mara (12).....372 Bay St.
Frank McLaughlin (7) .....34 King St., W.

LIMITED MEMBERS

Stamford — **CONNECTICUT**
Robert S. Hay (14).....300 Main St.

Waycross — **GEORGIA**
George Fesperman (5).....208 Parker St.

Chicago — **ILLINOIS**
William C. McLennan (11).....
.....6675 Northwest Highway

Flint — **MICHIGAN**
Herschel S. Green (16)...904 Citizens Bank Bldg.

Muskegon
William Bush (3).....38 Diana Ave.

Elizabeth — **NEW JERSEY**
R. Mason Kirkland (15).....125 Broad St.

Keyport
Samuel De Bow Walker (10)..101 Atlantic Ave..

Newark
Rudolph Kruger (6).....11 Hill St.

Dayton — **OHIO**
George H. Snyder (2).....1040 Third Natl. Bldg.

Williamsport — **PENNSYLVANIA**
Fred B. Wetzel (12).....25 W. Third St.

Pawtucket — **RHODE ISLAND**
Leo V. Boyle (4).....44 Broad St.

Providence
Richard A. Hurley (9)..723 Hospital Trust Bldg.

Dallas — **TEXAS**
Alfred J. Beilharz (13).....6401 Hillcrest Ave.

Donna
Josh Ewing (8).....Donna

Wheeling — **WEST VIRGINIA**
Harry C. Miller (7).....313 Wheeling Steel Bldg.

The officers of the Institute announce with sincere regret the death of Wayland P. Cramer, M.A.I., Camden, New Jersey, Secretary of the New Jersey Chapter Number 1. Admitted July 1, 1932. Died July 14, 1935.

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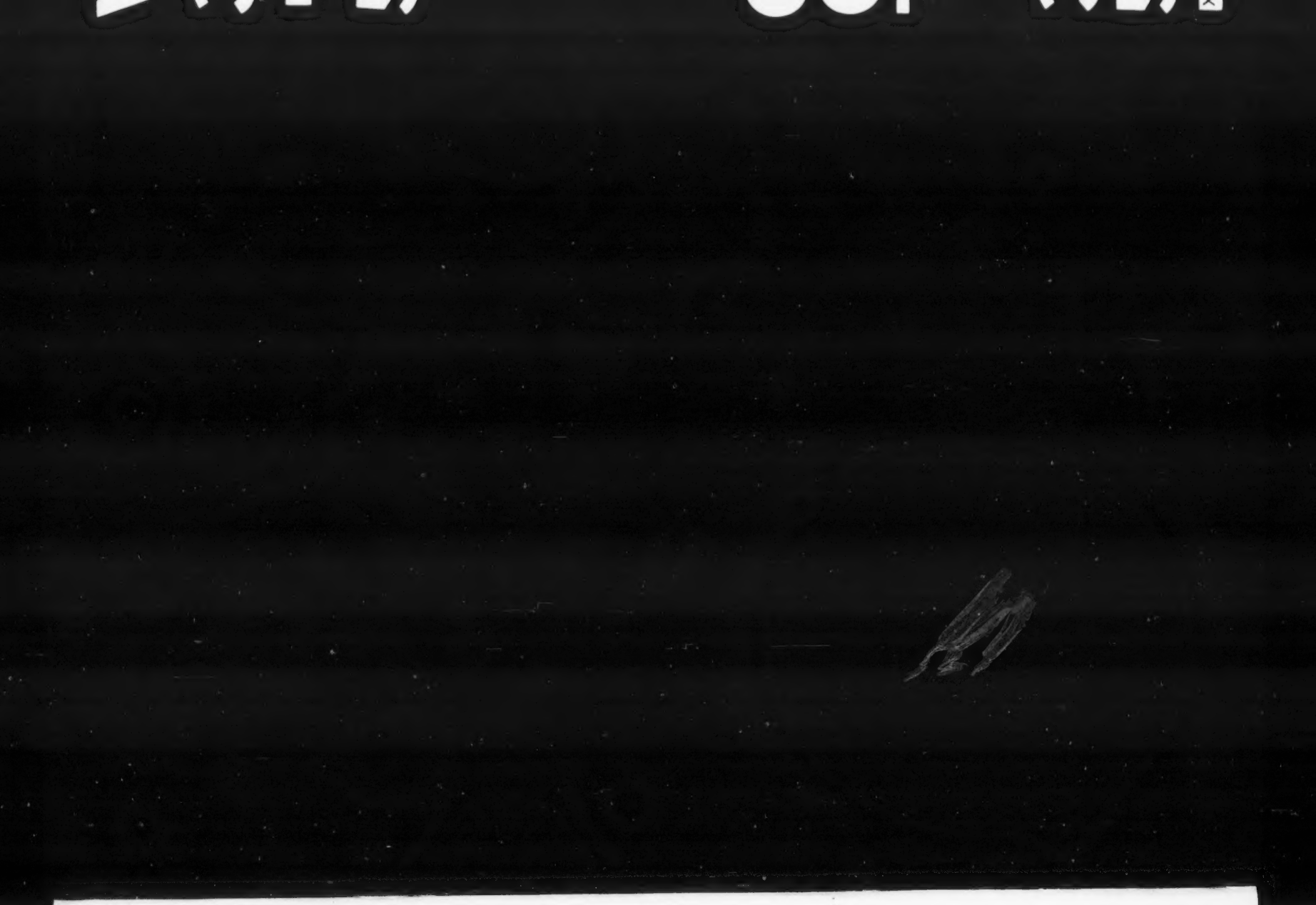
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